A Guide to Patient-Based Funding

Ministry of Health and Long-Term Care

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Ontario

Ministry of Health and Long-Term Care

Copies of this guide can be obtained from

Funding Strategy and Policy Team,

Health System Funding Policy Branch,

Health System Information Management and Investment Division

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A Guide to Patient-Based Funding

Purpose and Objectives of the Guide

Purpose

The purpose of this Guide is to inform the Local Health Integration Networks (LHINs) and Health Service Providers (HSPs) of changes to funding policy as a result of the introduction of Patient-Based Funding, a component of Health System Funding Reform.

This document is intended as a guide to the current PBF approaches. It includes methodologies and approaches which are evolving and subject to change, as refinements are made in consultation with stakeholders.

Objectives

This Guide seeks to inform the reader of:

- The Ministry's vision with respect to Health System Funding Reform and its plan to get there;
- Changes to hospital and Community Care Access Centre funding as of April 1, 2012, including:
  - Utilization of the Health Based Allocation Model
  - Introduction of four Quality-Based Procedures: cataract surgery, chronic kidney disease, primary unilateral hip replacement, and primary unilateral knee replacement; and
- How these changes affect LHINs, HSPs and Cancer Care Ontario/Ontario Renal Network (CCO/ORN) operations, including: accountability, volume management, conditions of funding, reconciliation and recovery.

Executive Summary

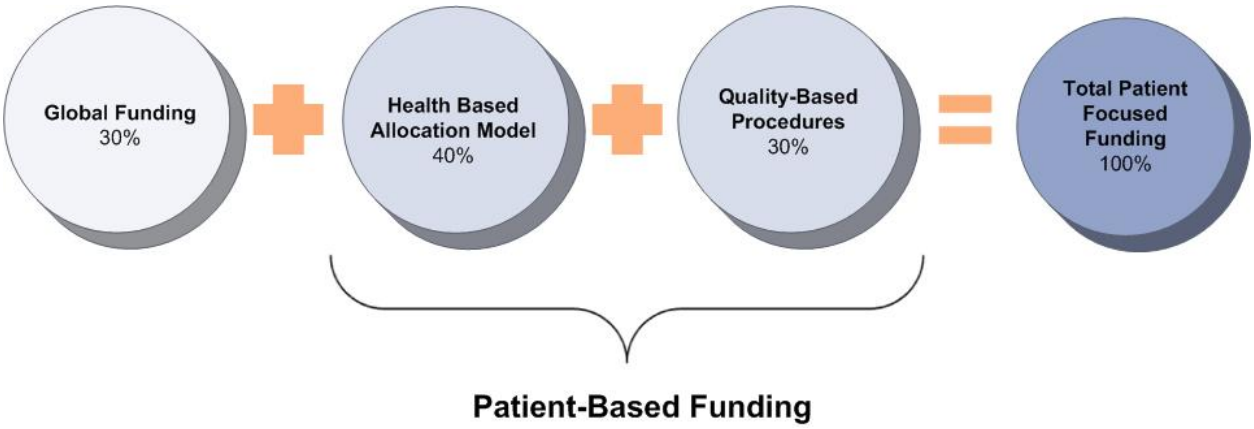
Executive Summary

Introduction

1. As underlined in its Action Plan for Health Care, the Ministry is committed to the quality agenda, despite today's tough fiscal climate. The Ministry will continue to support quality improvement, ensure access where it is needed, and improve the patient experience.

2. To achieve these goals, the Ministry is introducing Patient-Based Funding (PBF). With PBF, health care funding will shift from the current predominantly global funding system towards an activity-based funding model that better ensures patients get the right care in the right place at the right time and for the right price.

3. PBF has two components: Health Based Allocation Methodology (HBAM) funding and Quality-Based Procedure (QBP) funding. Together, these PBF components will comprise 70% of a Health Service Provider's (HSP's) total funding ("total patient focused funding") by the end of the implementation plan. The following represents the anticipated end state, using hospitals as an example.



HBAM Funding	QBP Funding
HBAM is an allocation model and management tool that uses demographic, clinical, and financial information to estimate expected volumes and costs at a facility level; this identifies an organization's expected share of overall sector funding. The model provides an evidence-based distribution of funding by shifting resources informed by the aggregate cost, volume, and type of patients. For more information on HBAM, please refer to	QBPs utilize a 'price x volume' approach to target a set of clinical areas that demonstrate significant opportunity to introduce evidence into clinical pathways, reduce practice variation, attain cost efficiencies, and catalyze alignment of quality with funding. Four QBPs have been selected for roll-out for Year 1: cataract surgery, Chronic Kidney Disease services, primary unilateral hip replacement, and primary unilateral knee replacement. Prices for Year 1 QBPs are set at the 40th percentile of case costs. Note: Year 1 40th percentile price is a 'stretch' and

Appendix B.	efficient price point and has been acknowledged as a starting point toward the evolution of clinically-informed pricing. QBPs will reimburse HSPs for the types and quantities of patients treated using evidence-informed prices that are adjusted for patient complexity and the quality of care delivered. As QBP implementation evolves, the prices will be further informed by clinical consensus and best practice evidence.

HSFR will be phased in over multiple years, starting in 2012/13. In all phases, LHINs and HSPs will be informed of their base budget adjustments within the fiscal year, and they will be expected to manage their budgets in accordance with their accountability requirements. Assistance will be provided by the Ministry, LHINs and peers in terms of education, toolkits and other transitional supports. The following is the initial proposed plan for HSFR implementation. Long-Term Care Homes (LTCH) are already funded to a significant degree through acuity based funding and will be brought further into PBF as implementation continues.

Sector	Activity Type	Year 1 April 2012	Year 2 April 2013	Year 3 April 2014
Hospital Sector (% of PBF Base)	QBP Price × Volume	6%*	15%**	30%***
	HBAM	40%	40%	40%
Long-Term Care Homes (% of per diem funding)	QBP Price × Volume		65%**	70%***
	Acuity Adjusted	60%		
Community Care Access Centre (CCAC) Sector (% of PBF Base)	QBP Price × Volume	1%*	TBD	70%
	HBAM	10%	30%	

* Quality Initiatives for April 2012 are: cataract surgery, chronic kidney disease services, primary unilateral hip replacement, and primary unilateral knee replacement.
** In addition to 2012 activities, 2013 quality initiatives to be finalized in 2012.
*** In addition to 2012 and 2013 quality initiatives, 2014 quality initiatives to be finalized in 2013.

4. Passed in June 2010, the *Excellent Care for All Act* (*ECFAA*) puts patients first by improving the quality and value of the patient experience through the application of evidence-based health care. *ECFAA* positions Ontario to implement fast track reforms and develop the levers needed to mobilize the delivery of high quality, patient-centered care. Elements of *ECFAA* combine structural changes in system and organizational governance, evidence-based decision making, payment mechanisms and organizational supports into an integrated package of system reforms.

5. In her May 3, 2010 address, the Minister of Health and Long-Term Care highlighted the fourth principle of ECFA – *Payment, policy and planning support quality and efficient use of resources* – with the announcement of the implementation of a PBF system for Ontario's hospitals. The Minister's announcement of the government's PBF strategy marked the first time the province has committed to make a decisive shift away from global hospital funding.

6. PBF has been implemented in a majority of Organization for Economic Co-operation and Development (OECD) nations. International experiences with PBF have provided governments, insurers and purchasers with evidence-based funding tools that communicate a number of powerful positive incentives.

7. PBF presents a platform for Ontario to: (1) integrate fragmented hospital funding lines; (2) shift from cost-based allocation to price-based reimbursement; (3) support the paradigm shift from a culture of "cost containment" to "quality improvement"; and (4) align hospital funding with person-centered funding across the continuum of care.

Hospitals

8. In the hospital sector, PBF shifts from the view prevailing under global funding that patient care episodes are expenses incurred by a hospital to a view that patient care episodes will increase a hospital's revenue. Through tying funding to activity and episodes of care, hospitals are incented to invest in patient safety activities and adopt best practices in their care delivery models.

9. The PBF approach creates an incentive for hospitals to provide high quality care in a cost-effective manner, which is consistent with ECFA priorities. Hospital funding under HSFR will reimburse hospitals based on the inputs that are needed to treat specific cases. The experience of other jurisdictions shows that, under PBF, hospitals are financially motivated to use more efficient and effective means of care to treat patients versus under global funding approaches.

10. In the hospital sector, PBF consists of two key components:

<table>
<tr><th>HBAM Funding</th><th>QBP Funding</th></tr>
<tr><td rowspan="4">In Year 1, HBAM will be applied to 40% of applicable hospital base funding with mitigation to manage impacts over a multi-year period.</td><td>In 2012, the 'early adopter' QBPs are funded through PBF for the hospital sector.

For the four QBPs, relevant funding will be 'carved-out' from the hospital global funding and, where applicable, merged with Wait Time Strategy (WTS) funding. This consolidated funding pot will then be reallocated according to a 'price x volume' approach.</td></tr>
<tr><td>Cataract surgery

Price: $497.11/ case</td></tr>
<tr><td>Chronic kidney disease services

Base Price: $263/weighted unit, with other prices being generated using a weighted schedule which is a combination of the weights of the 1997 Joint Policy and Planning Committee (JPPC) report (status quo rates) and modified weights for new services and home modalities (to reflect historical price increases)</td></tr>
<tr><td>Primary unilateral hip replacement

Price (Acute): $7,070.88/ case</td></tr>
</table>

	Price (Inpatient Rehabilitation): $6,073.50/ case
	Primary unilateral knee replacement Price (Acute): $6,253.79/ case Price (Inpatient Rehabilitation): $4,872.26/ case

11. To prevent dramatic funding fluctuations that may arise, the Ministry has developed a multi-year mitigation strategy for HBAM and QBP funding: the application of funding corridors during HSFR implementation.

Community Care Access Centres

12. Home care services include case management, nursing, personal support, rehabilitation, and residential hospice services. The Community Care Access Centre (CCAC) model is fundamental to the principles of the HSFR. By supporting hospital discharge and providing services at home and in the community, CCAC services promote sustainable health care built on access to quality services, integrated across the local health system.

13. In the home care chapter of his 2010 report, the Auditor General of Ontario has recommended that CCACs should be funded through a locally assessed, client-need approach, rather than the current global funding allocated on a historical basis, to support greater equity in funding and service provision.

14. Starting in 2012/13 the Ministry is implementing the HSFR that shifts reimbursement of CCACs from the current system of predominantly global funding towards an evidence-based patient-focused funding model that better reflects the needs of Ontario residents and creates incentives for CCACs to deliver care more efficiently.

15. In the CCAC sector, PBF consists of two key components:

HBAM Funding	QBP Funding
In Year 1, HBAM will be applied to 10% of applicable CCAC base funding with mitigation to manage impacts over a multi-year period.	In 2012, the 'early adopter' QBPs are funded through PBF for CCACs. For all QBPs, relevant funding will be 'carved out' from the CCAC global funding and, where applicable, merged with Wait Time Strategy funding. This consolidated funding pot will then be reallocated according to a 'price x volume' approach.
	Primary unilateral hip replacement Price (Community Rehabilitation): $627.93/ case
	Primary unilateral knee replacement Price (Community Rehabilitation): $554.24/ case

16. To prevent dramatic funding fluctuations that may arise from applying HBAM to allocate a portion of CCAC base funding, the Ministry has developed a mitigation approach for HBAM and QBPs, through application of funding corridors, during HSFR implementation.

Abbreviations

Abbreviations

APTS
Allocation Payment Tracking System

ATC
Access to Care

CAN-STRIVE
Canadian Staff-Time and Resource Intensity Verification

CCAC
Community Care Access Centre

CCO
Cancer Care Ontario

CJRR
Canadian Joint Replacement Registry

CKD
Chronic Kidney Disease

DAD
Discharge Abstract Database

ECFAA or **ECFA**
Excellent Care for All Act, 2010, or Excellent Care for All Strategy

EFT
Electronic Funds Transfer

FMH
Forensic Mental Health

HBAM
Health Based Allocation Model

HQO
Health Quality Ontario

HSFR
Health System Funding Reform

HSP
Health Service Provider

JPPC
Joint Policy and Planning Committee

LHIN
Local Health Integration Network

LHSIA
Local Health System Integration Act, 2006

LTCH
Long-Term Care Home

LTCHA
Long-Term Care Homes Act, 2007

Minister
Minister of Health and Long-Term Care

Ministry
Ministry of Health and Long-Term Care

MIS
Management Information Systems

MLPA
Ministry-LHIN Performance Agreement

M-SAA
Multi-Sector Service Accountability Agreement

NACRS
National Ambulatory Care Reporting System

NRS
National Rehabilitation Reporting System

OCCI
Ontario Case Costing Initiative

OCDM
Ontario Cost Distribution Methodology

OECD
Organization for Economic Co-operation and Development

OHIP
Ontario Health Insurance Plan

OHRS
Ontario Healthcare Reporting Standards

ORN
Ontario Renal Network

PBF
Patient-Based Funding

QBP
Quality-Based Procedure

RAI-HC
Resident Assessment Instrument – Home Care

RAI-MDS
Resident Assessment Instrument – Minimum Data Set

RUG
Resource Utilization Grouper

SAA
Service Accountability Agreement

SETP
Surgical Efficiency Targets Program

SRI
Self Reporting Initiative

WERS
Web Enabled Reporting System

WTIS
Wait Time Information System

WTS
Wait Time Strategy

Chapter 1: Introduction

1.0 Patient-Based Funding

As underlined in its Action Plan for Health Care, the Ministry is committed to the quality agenda, despite today's tough fiscal climate. The Ministry will continue to support quality improvement, ensure access where it is needed, and improve the patient experience.

To achieve these goals, it is imperative that the manner in which health care is funded changes to incent efficient delivery and shift resources to where they are most needed. The Ministry will do this through implementing PBF, a component of the HSFR.

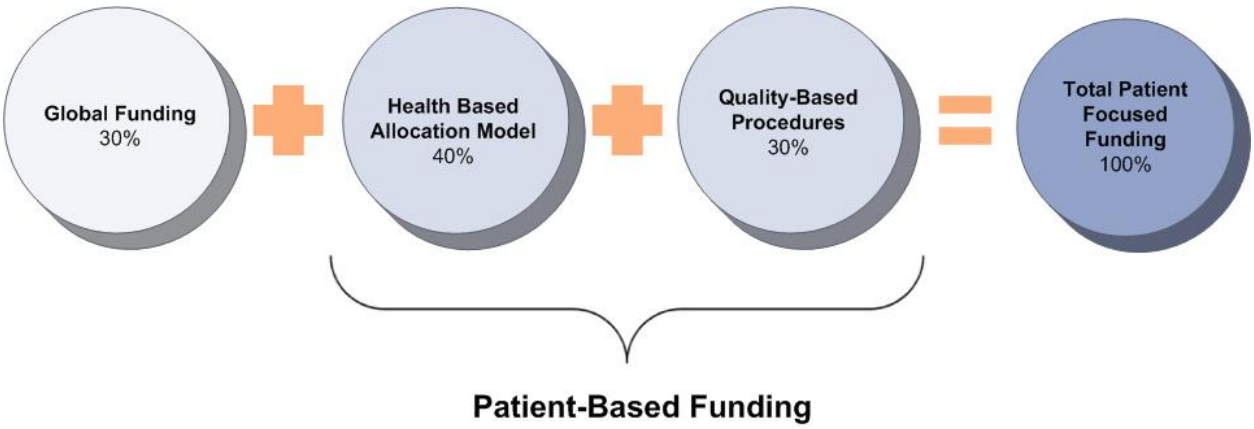
With PBF, health care funding will shift from the current predominantly global funding system towards an activity-based funding model that better ensures patients get the right care in the right place at the right time and for the right price.

PBF offers an integrated approach to health system funding; it removes silos that restrict flexibility in funding and the provision of health services through:

- Bundling payments to HSPs; and
- Adopting a 'money follows the patient' principle.

1.0.1 What is Patient-Based Funding?

PBF has two components: Health Based Allocation Model (HBAM) funding and Quality-Based Procedure (QBP) funding. Together, PBF components comprise 70% of an HSP's total funding by the end of the HSFR implementation plan. The following illustrates the anticipated end state, using hospitals as an example.



- **HBAM funding** is allocated to HSPs as determined by characteristics of the population being served. A population health-based model, HBAM, is used to allocate a portion of funding in the hospital and CCAC sectors; and

- **QBP funding:** QBPs are specific patient groups that will allow the health system to achieve better quality and system efficiencies through utilizing a 'price x volume' approach.

Global funding will continue to be used for activities that cannot be modeled or that are unique, such as indirect costs.

HSFR recognizes HSPs with unique roles, such as academic health science centres and those serving small and rural communities.

Ontario will gradually transition to PBF over multiple years, as described in the "Where We're Going" section below.

(a) HBAM Funding

HBAM is an allocation model and management tool that uses demographic, clinical, and financial information to estimate volumes and costs at a facility level; these estimates identify an organization's expected share of overall sector funding.

The model provides an evidence-based distribution of funding by shifting resources informed by the aggregate cost, volume, and type of patients.

For more information on HBAM, please refer to Appendix B.

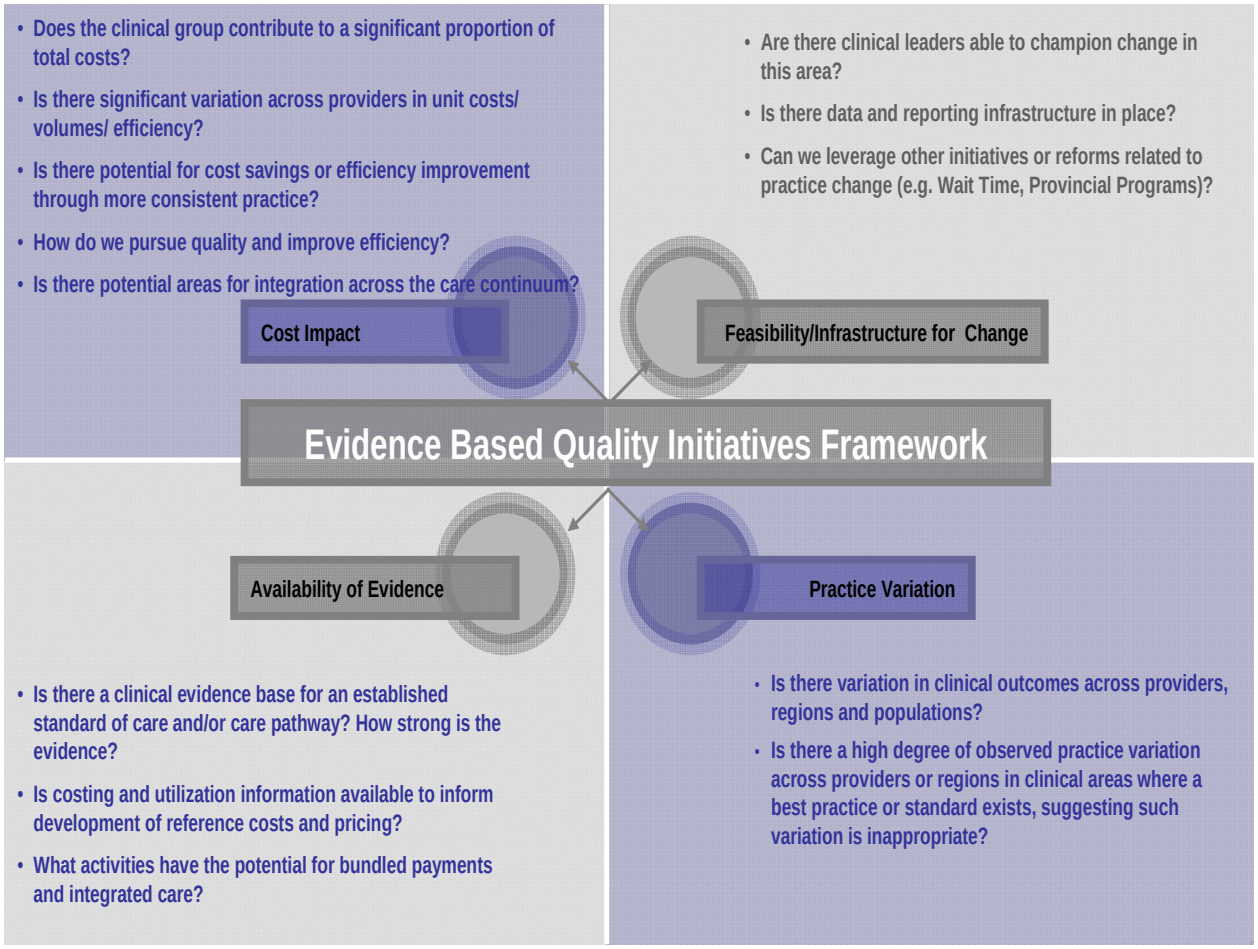
(b) QBP Funding

Commencing April 2012, the Ministry introduced a set of QBPs aimed at accelerating quality improvement and improving system value. QBPs utilize a 'price x volume' approach and target a set of clinical areas that demonstrate significant opportunity to introduce evidence into clinical pathways, reduce practice variation, attain cost efficiencies, and catalyze alignment of quality with funding.

QBP funding will be provided to HSPs for the types and quantities of patients treated using evidence-informed prices that are adjusted for patient complexity. As QBP implementation evolves, the prices will be further informed by clinicians' consensus and best practice evidence.

An evidence-based framework has been developed to support the selection of QBPs. The framework offers approaches to identifying opportunity areas that have the potential for reducing inappropriate variation, improving outcomes, safety, efficiency and/or patient focus.

Evidence-based criteria for identifying QBPs:



Currently, the selection criteria look at four perspectives to identify QBPs. These criteria will continue to undergo refinements and enhancements as the funding model is developed and the early adopter QBPs are evaluated. The selection framework provides another reinforcement tool to emphasize the importance of aligning quality with funding. Such an alignment will remain at the forefront of discussions as Ontario moves forward with the development of a 'quality-driven' funding model that promotes fiscal sustainability and enhances health system user experience.

One of the core tenets of QBP funding is the 'price x volume' approach to funding HSPs:

Setting QBP Prices	Managing QBP Volumes
Targeting price and volumes creates an incentive for HSPs to adopt best practices in their care delivery model In Year 1, prices are set to encourage efficiency. As implementation progresses, each QBP will be further developed by clinical experts to build evidence-informed best practices that will enable a 'best-practice price' to be derived. The Ministry will administer the provincial prices which will be informed by recommendations, from stakeholder	The Ministry, in collaboration with Local Health Integration Networks (LHINs), Health Quality Ontario (HQO) and clinical experts, will establish mechanisms for managing service volumes at the system and Health Service Provider (HSP) levels. Funding mechanisms for service volumes at the HSP level will be linked with an overall planning policy framework that will allow the Ministry, LHINs, agencies and other funders to repatriate and reallocate services

partners and agencies, around changes and updates to the prices, including monitoring for the presence of distortion incentives and effects. The Ministry will update the prices to reflect costing data, new technologies, policy objectives and considerations such as efficiency expectations and availability of new funding.	within the appropriate flow of funding. LHINs and agencies will allocate volumes to HSPs, based on LHIN service planning and expected utilization. LHINs will set targets for annual activity levels for HSPs at the care type level, and reconcile with HSPs at the end of the year for the service volumes performed against their contracted targets.

1.1 Alignment with the Excellent Care for All Strategy

Passed in June 2010, *ECFAA* puts patients first by improving the quality and value of the patient experience through the application of evidence-based health care. *ECFAA* positions Ontario to implement fast track reforms and develop the levers needed to mobilize the delivery of high quality, patient-centered care. Elements of *ECFAA* combine structural changes in system and organizational governance, evidence-based decision making, payment mechanisms and organization supports into an integrated package of system reforms.

Four core principles underpin the vision of ECFA:

- Care is organized around the person to support their health;
- Quality and its continuous improvement is a critical goal across the health system;
- Quality of care is supported by the best evidence and standards of care; and
- Payment, policy and planning support quality and efficient use of resources.

In her May 3, 2010 address, the Minister of Health and Long-Term Care highlighted the fourth principle of ECFA Strategy – *Payment, policy and planning support quality and efficient use of resources* – with the announcement of the implementation of a PBF system for Ontario's hospitals.

The Minister's announcement of PBF marked the province's commitment to make a decisive shift away from global hospital funding. The intent of this initiative is to steadily shift a significant part of hospital, CCAC and LTCH budgets towards prospective case mix allocation based on evidence-informed provincial rates set for case mix groups.

A patient-based funding methodology has been implemented in a majority of OECD nations. International experiences with patient-based funding have provided governments, insurers and purchasers with evidence-based funding tools that communicate a number of powerful incentives to:

- Improve efficiency;

- Reduce length of stay;
- Reduce wait times;
- Improve quality (when clear measures are in place);
- Ensure care in more appropriate settings;
- Enhance volume and utilization management; and
- Increase sustainability through fiscal savings.

Prior to PBF, Ontario's hospitals were funded largely through historically-derived global funding, with an additional array of incremental funding lines. While 'price x volume' approaches have been used in funding models for the WTS and Priority Services (Provincial Programs), these have been limited to incremental funding changes.

PBF presents a platform for Ontario to: (1) integrate fragmented hospital funding lines; (2) shift from cost-based allocation to price-based reimbursement; (3) support the shift from a culture of 'cost containment' to 'quality improvement'; and (4) align hospital funding with person-centered funding across the continuum of care.

1.2 Where We're Going

PBF will be implemented across a wide-range of services and sectors in order to maximize benefits to health system users, HSPs, LHINs, and the Ministry of Health and Long-Term Care ("the Ministry"). HBAM funding and QBPs will comprise a greater proportion of hospital, CCAC, and LTCH funding with each phase of HSFR implementation.

The HSFR incorporates a multi-year phased transition from global funding to PBF. The proposed policy changes and initial implementation plan is outlined in the table below. LTCHs are already funded to a significant degree through acuity based funding and will be brought further into PBF as implementation continues.

Sector	Activity Type	Year 1 April 2012	Year 2 April 2013	Year 3 April 2014
Hospital Sector (% of PBF Base)	QBP Price × Volume	6%*	15%**	30%***
	HBAM	40%	40%	40%
Long-Term Care Homes (% of total per diem funding)	QBP Price × Volume		65%**	70%***
	Acuity Adjusted	60%		
CCAC Sector (% of PBF Base)	QBP Price × Volume	1%*	TBD	70%
	HBAM	10%	30%	

* QBPs for April 2012 are: cataract surgery, chronic kidney disease (CKD) services, primary unilateral hip replacement, and primary unilateral knee replacement.
** In addition to 2012 activities, 2013 quality initiatives to be finalized in 2012.
*** In addition to 2012 and 2013 quality initiatives, 2014 quality initiatives to be finalized in 2013.

In later phases of HSFR, the following quality measures will be implemented in all three sectors:

- Unplanned readmissions; and
- Preventable adverse events.

Inclusion of physician activity in PBF will be reviewed in years 2 and 3.

PBF is intended to improve quality and efficiency in health services delivery through the implementation of a comprehensive PBF model that incorporates patient-level funding rolled up into HBAM funding. The end vision comprises funding based on episodes of care and quality outcomes where health system users receive appropriate services at the right place, at the right time, at the right price.

The Ministry has developed a comprehensive change management strategy to enable the implementation of PBF. For information, including tools available to HSPs, please visit www.hsimi.com. Ministry, LHIN, agency and HSP staff are required to obtain a user name and password prior to accessing this website. Instructions can be found on the website's homepage.

1.3 LHIN and CCO/ORN Accountability Roles

A key goal of HSFR is to bring clarity to the roles and accountabilities of the Ministry, LHINs, agencies, and HSPs in the new funding system.

As per *LHSIA*, LHINs are able to provide appropriate funding to their HSPs within the Ministry's allocation and in line with their related accountabilities. Similarly, as per the Ministry – CCO Agreement for CKD funding, CCO/ORN is able to provide funding to CKD providers within the Ministry's allocation and in line with their related CKD Management Agreement.

Through their respective SAAs with HSPs, LHINs and CCO/ORN will be able to ensure accountability for funding in line with the performance measures and targets identified in the agreements. As per *ECFAA*, senior managers of hospitals are accountable for the results achieved by their organizations. The use of evidence-based funding approaches as a management tool will further facilitate the Ministry's strategic objectives and support the HSFR principles of quality, access, and integration.

1.4 LHIN and CCO/ORN Operational Management

Using evidence-based funding (e.g., HBAM, best practice) will allow LHINs and the CCO/ORN to examine allocations to HSPs and the types of services they provide in order to determine the changes needed to make local health systems more efficient. For example, HBAM contains a methodology to identify cost and service variances at the LHIN and HSP level and adjusts funding to reflect population demand for services. This helps LHINs and CCO/ORN to:

- Allocate health services based on evidence (e.g., direct funding to areas of need);
- Anticipate future service needs of population (i.e., demographic change, change in disease prevalence); and
- Forecast market share at the LHIN and HSP service level and assist to consider related needs (e.g., capital implications).

The Ministry's role is to identify health system funding policies and methodologies. The authority to allocate funds to their respective HSPs is outlined in the *LHSIA* for the LHINs and in the Ministry-CCO Agreement for CKD funding.

The reasons for LHINs and CCO/ORN using evidence-based approaches to inform their allocations to HSPs include:

- Evidence-based methods provide for consistent, valid, reliable allocation of resources to HSPs; and
- Some level of consistency in approach is required to enable benchmarking and evaluation of performance (i.e., assessment of quality in access to services and cost-effectiveness).

The Ministry, LHINs, and CCO/ORN will be able to use evidence-based approaches to reallocate funding within their local health systems to ensure greatest efficiency and highest quality provision of care.

Chapter 2: Hospitals

2.0 Introduction

Under a global budget, hospitals tend to view patient episodes as expenses. Under PBF, hospitals will have new incentive to reduce the cost per patient episode and improve quality.

Consistent with ECFA priorities, PBF creates incentives for hospitals to provide more efficient care by reducing costs per episode of care in line with evidence. Funding will be provided to hospitals based on the inputs that are needed to treat specific cases, making the provision of unnecessary services unprofitable. The experience of other jurisdictions shows that, with PBF, hospitals are financially motivated to use more appropriate means of care to treat patients than when funded through a global approach. The PBF approach also creates an incentive for hospitals to plan their capacity (i.e., number of hospital beds, size or number of departments) to an appropriate level to correspond to patient demand, which also contributes to the sustainability of Ontario's health care system.

2.0.1 Background: 2011/12 Funding Policy

Prior to implementation of the HSFR, approximately 70% of hospital funding provided by the Ministry was distributed in the form of global funding. In addition, many hospitals received a number of separate funding streams of incremental 'price × volume' funding through program areas such as WTS, Provincial Programs (specialized programs such as transplants and chronic kidney disease services) and Post-Construction Operating Plan funding (for increased activity following capital expansion). These funding lines varied in the size of the expenditure and the policies employed for setting rates, volumes, reconciliation of funding with activity delivered and existence of quality incentives.

2.0.2 Future Changes Under HSFR

Starting in 2012/13, HSFR shifts funding to hospitals from the current system of predominantly global approaches towards a Patient-Based Funding (PBF) funding model that better reflects the needs of Ontario residents and creates incentives for hospitals to deliver care more efficiently.

In the hospital sector, the PBF model consists of two key components:

HBAM funding: This model uses an allocation methodology based on a wide range of demographic, clinical and financial data to estimate expected health care expenses at the hospital level.

In 2012/13, HBAM funding is allocated from the hospital's global funding.

Quality-Based Procedure funding: Funding is allocated to specific procedures based on a 'price × volume' basis. In 2012/13, the following QBPs are funded under the new model:

- Primary unilateral hip replacement;
- Primary unilateral knee replacement;
- Chronic kidney disease services; and
- Cataract day surgery.

2.1 Patient-Based Funding Envelope and Global Funding

The PBF envelope is the total base funding from all hospitals across the province (exceptions as noted below) excluding such funding as Forensic Mental Health, Priority Services (mainly cardiac and transplant) and Critical Care.

- Funding for small hospitals and specialty mental health hospitals are excluded from the estimation of the PBF envelope in 2012/13

- Provincial PBF envelope for 2012/13 allocation is estimated at $12.8B

2.2 HBAM Funding

2.2.1 HBAM Funding

HBAM is a population health-based funding methodology that uses population and clinical information to inform funding allocation. Population information includes basic demographic data such as age, gender and growth projections, as well as socio-economic status and rural geography. Clinical information includes measures of disease and status such as diagnostic and procedural information related to the different types of care provided to the population.

The model is made up of two main components:

- **The service component**: Estimates annual use of health services in each care type, taking into account each Ontario resident's clinical, social and demographic conditions; and

- **The unit cost component**: Determines unit costs in each care type for each HSP and recognized HSP characteristics that justifiably lead to higher unit costs.

The model generates a 'share of expected expenses' which is used to determine each LHIN's and ultimately each HSP's share of available funding.

HBAM includes cost adjustments that take into account teaching activities and performance of highly specialized procedures. These adjustments benefit academic centres and other hospitals that perform those activities by accounting for additional costs associated with them.

In 2012/13, 40% of the PBF envelope ($5.1B) was allocated using the revenue-adjusted HBAM expected share.

Under HBAM, hospitals are reimbursed for the costs related to the provision of patient care (direct costs), as well as for overhead and administrative costs (indirect costs), which are not directly attributable to patient volumes and/or case mix. Funding adjustments for indirect costs will be considered as part of the future policy direction.

(a) Corridors

In 2012/13, the Ministry is implementing a funding mitigation strategy; a ±2% corridor is being applied to HBAM funding.

The purposes of the mitigation strategy are to:

- Provide the right balance between health system funding stability and changes to hospital funding allocations due to HSFR implementation;
- Prevent dramatic funding fluctuations that may arise from applying HBAM to allocate funding;
- Allow HSPs to plan for service capacity and help minimize service disruption, while providing savings to the province; and
- Allow hospitals to adjust to changes in funding.

The funding corridor represents the maximum funding gain or loss experienced by a hospital. A mitigation corridor of ±2% means that no hospital will experience a funding change greater than 2%.

2.2.2 Accountability and Conditions of Funding

The terms and conditions of HBAM funding will be specified in the Ministry-LHIN Performance Agreement (MLPA) between LHINs and the Ministry effective April 1, 2012.

The LHIN is required to maintain financial records for this allocation which must be used for the intended and approved purposes.

Through the Hospital Service Accountability Agreement (HSAA) process, LHINs and hospitals will negotiate performance targets/outcomes associated with each hospital's funding.

Notification to the Ministry to flow funding to the HSP by use of the Allocation Payment Tracking System (APTS) is the responsibility of the LHIN.

2.2.3 Cash Flow

Payments to hospitals are based on executed Minister and Assistant Deputy Minister funding approval letters which provide the authority for the payment and state the terms and conditions of the funding.

Payments are processed through regularly scheduled semi-monthly EFTs.

Payments are made to the 'hospital corporation' which are responsible for managing and paying their associated 'hospital sites'.

2.2.4 Reconciliation and Recovery

Funding letters provide the authority to conduct reconciliations and to recover unspent funds and/or funds not used for their intended purposes in accordance with the Ministry's year-end reconciliation policy.

HBAM, when applied to hospital global funding, does not require reconciliation or recovery as funding is intended to support general operating expenditures (e.g., salaries and wages, utilities, etc.) as opposed to being tied to a specific initiative or program area.

2.3 Quality-Based Procedure Funding

2.3.1 Cataract Surgery

(a) Introduction

(i) 2011/12 Policy

Previously, cataract surgeries were funded through hospital base budgets or incrementally through Ontario's WTS. HSFR will shift funding from the current predominantly global funding system towards a model where all funding is provided through one 'price x volume' allocation approach.

Research suggests that new technology in the field has allowed for efficiencies in the way cataract surgery is or can be performed. Cataract surgery costs have been dropping by about 5-7 per cent per year for more than fifty years as the procedure has steadily improved. As a result, HSFR will reflect these advancements and better align cataract funding with the actual costs of these procedures in Ontario.

(ii) Future Changes

HSFR will be implemented over multiple years. Year 1 changes for cataract surgery include a price and volume change. Performance will be monitored during Year 1 to mitigate against issues that may arise. In Year 2, the Ministry will monitor the rate and make adjustments based on best practice evidence as needed. Over the course of implementation, the Ministry will also work with clinical experts to develop standardized clinical pathways based on quality-based best practices.

(b) Data Sources

Multiple data sources, both financial and clinical, were used to develop the funding for cataract surgery. The data sources by calculation are:

Carve-Out:

- 2010/11 NACRS
- 2010/11 OCCI
- 2010/11 OCDM

- 2011/12 hospital-specific incremental funding growth

Price:

- Based on 2010/11 OCCI data

Volume:

- 2008/09, 2009/10, 2010/11 and 2011/12 actual volume from NACRS

(c) Carve-out

Until 2011/12, cataract surgery funding made up a portion of the global funding of hospitals. In 2012/13, this cataract portion of the global funding was identified through a "carve-out".

In 2012/13, cataract surgery funding is also excluded from the 2010/11 data used in HBAM to ensure that the funding from cataract surgery is flowing through the QBP funding only.

(i) Approach

1. Adjust cost per weighted case for outliers, limiting to within 10th and 90th percentile of unit costs
2. Determine 2010/11 actual expense through multiplying actual weighted cases by actual direct cost per weighted case
3. Adjust for growth to 2011/12

(d) Price

The price for cataract surgery will be set for total direct costs. The base price in 2012/13 is $497/case, which is the 40th percentile price of all cases from the OCCI 2010/11 data, grown to 2011/12.

Rationale: Price set at the 40th percentile will encourage system efficiency as best practices are incorporated into the price for HSFR years 2 and 3.

(e) Volume

Funding for cataract surgeries will be allocated on a 'price x volume' approach. Volumes are allocated at the LHIN-level and LHINs are responsible for making HSP-level allocation decisions.

(i) LHIN Volume Management

The LHINs have the authority to reallocate cataract volumes between their respective service providers. In doing so the LHIN is committed to:

1. Ensuring that care is delivered to the patient in a care setting that best meets the needs of the patient,
2. Ensuring that volumes are distributed effectively across the LHIN, and
3. Ensuring that service utilization is being optimized across the LHIN.

Specific conditions related to LHIN volume management are set out in the Conditions of Funding document associated with the QBP funding letter.

(ii) Initial Volume Approach

1. The 2011/12 cataract volumes were calculated by growing the 2010/11 actual volume (from NACRS) using a two year historical average growth (based on growth from 2008/09 to 2009/10 and 2009/10 to 2010/11)

2. The 2011/12 provincial total cataract volume is distributed to facilities using the actual volume share from the 2010/11 fiscal year
3. Hospitals are allocated 90% of their 2011/12 volume
4. Exception: Three hospitals were funded at 100% of their 2011/12 volume based on their historical cataract WTS performance: The Credit Valley Hospital and Trillium Health Centre; Orillia Soldiers Memorial Hospital; and Timmins & District General Hospital

(iii) Final Volume Allocation Approach

1. Final volumes are based on 2011/12 year-end NACRS Accountability Cut. Inclusion criteria are those with:
    a. Patient category = "DS"
    b. Main intervention = 1CL89
    c. Province issuing HCN = "ON"
    d. Excluded cancelled and out of hospital cases

(f) Corridors

A funding corridor of ± 15% will be set to maintain system stability in 2012/13.

(g) Use of Funding

The funding allocated pursuant to the cataract QBP will be used solely for the purpose of providing cataract surgery.

The expectation is that as part of the funding commitment the LHIN and hospitals will:

- Examine quality and wait time trends throughout the year to determine areas of need and local and/or LHIN based solutions which may include redistribution of cases.
- Continue to report into the SRI, the WTIS, and the SETP.
- Continue to work towards reducing wait times by continuously managing wait lists for cataract procedures reported to the WTIS.
- Maintain their current mix of complex patients, or increase their mix such that it responds to local need.
- Ensure that the delivery of these surgical volumes will not result in a decrease in surgical volumes in other service areas or any other hospital services.

Any allocated volumes that are not performed in the year ending March 31, 2013 will be subject to recovery.

Specific conditions related to the use of funding are set out in the Conditions of Funding document associated with the QBP funding letter

(h) Cash Flow

Payments to hospitals are based on executed Minister and Assistant Deputy Minister funding approval letters which provide the authority for the payment as well as stating the terms and conditions of the funding.

Payments are processed through regularly scheduled semi-monthly EFT.

Payments are made to the "hospital corporation" which are responsible for managing and paying their associated "hospital sites".

(i) Reallocation, Reconciliation, and Recovery

Funding letters provide the authority to conduct reallocations, reconciliations and to recover unspent funds and/or funds not used for their intended purposes.

Key Principles:

- Volumes will be identified provincially and at the LHIN-level through the allocation at the start of the year
- A mid-year reallocation process will be provided for the opportunity for volumes to be shifted between LHINs
- Any funds not used for their specific intended purpose will be subject to recovery by the Ministry

Data Availability and Timelines:

LHINS and their HSPs will be required to submit performance data in the SRI for all services.

R**eallocation, Reconciliation and Recovery Processes:**

1) Intra-LHIN Reallocation Process:

- LHINs have the authority to move volumes between their HSPs within QBP services. These reallocations can happen at any time throughout the year but must be communicated to the Ministry for tracking purposes

Ex: Move Cataract Surgery volumes at Hospital A to Hospital B

- The process of moving volumes between QBPs (i.e. cataract surgery to primary unilateral knee replacement) will occur during the Ministry-led mid-year reallocation process
- Funds cannot be moved between QBPs funding and remaining WTS funding

2) Inter-LHIN Reallocation Process:

- During the mid-year reallocation process volumes will be redistributed across LHINs as necessary. If the LHINs identify QBP volumes that cannot be performed by year end within the LHIN, they will be redistributed to LHINs that identify the need for additional volumes
- There will continue to be a separate mid-year WTS reallocation process for LHINs that will be independent from the mid-year QBP reallocation process

3) Year-End Recoveries:

The year-end recovery process is important for cash management purposes as it matches the hospitals' allocation with the hospitals' actual year-end activity. Year-end recoveries are performed using the actual volume reported in SRI through Year-End Supplementary reports, which will be confirmed by the LHINs. Calculating the variance

between the actual volume and the funded volume (allocated) results in a net recovery amount. Recoveries will be processed against the HSPs directly.

Each HSP will have their funded cataract volumes reconciled against actual cataract volumes performed; any over- or underperformance will not be netted against any other QBPs

2.3.2 Chronic Kidney Disease

(a) Introduction

CKD funding is a strategic focus of both the HSFR and the ECFA strategy as kidney disease is costly for the health care system. In 2011/12, the total funding for CKD patients was estimated at over $555 million annually, representing approximately 3.79% of the provincial global hospital funding, for a patient group comprising less than 0.1% of the Ontario population.

The Ministry, in partnership with CCO, has engaged CCO/ORN to assist in the advancement of a provincial strategy to improve CKD services in Ontario.

The CCO/ORN has developed a PBF model for accelerating quality improvement and access to CKD services while improving system value.

The CKD PBF model developed by the CCO/ORN has significant potential for positive impact, particularly when integrated with other related CCO/ORN initiatives to: improve access to needed services; develop expanded performance measures and reporting frameworks; and, promote evidence-based best practices and quality improvement across the CKD system in Ontario.

(i) 2011/12 Policy

The CKD services/treatments are delivered through a *hub-and-spoke* model composed of 26 hospital CKD Regional Centres ("hubs") and 68 satellite units ("spokes"), either located in the hospital (47) or in community (21). The hospital Regional Centres are responsible for the overall CKD services within a geographic area.

Currently, 31 hospitals are receiving funding directly from the LHIN/ORN: of those 26 hospitals are responsible for the CKD Regional Program, while the other 5 hospitals are satellite units.

Prior to HSFR, the funding for the CKD program provided for four different components:

- Operational funding;
- Infrastructure funding;
- Incremental funding; and
- One-time start-up funding.

Operational, incremental and some infrastructure funding are the envelopes that will be funded through the QBP model. One-time start-up funding is determined on a case-by-case basis and thus would not be suitable for QBP.

Operational Funding:

Operational funding is the funding provided for specific volumes of CKD services/treatments on a "fee-for-service" basis.

Funding for services is provided to each hospital as:

- Base volumes –funding provided as part of the hospital's global funding and governed by the Hospital Service Accountability Agreement (H-SAA) between the LHINs and hospital providers

- Incremental volumes - as one-time funding provided through the CKD Management Agreement between CCO/ORN and the CKD providers since 2010/11.

The CKD funding allocation for the operating component uses the 1997 Joint Planning and Policy Committee (JPPC) *End-Stage Renal Disease* funding methodology which applies a price for a specific service based on a weighted schedule. The rates are determined as per the weighted schedule, where each service/treatment is assigned a weight indexed to the cost of a chronic hemodialysis level II treatment (one weighted unit). Until 2011/12 one weighted unit was set at a price of $199.50 and all other modality prices stemmed from their respective weights. For example, acute hemodialysis level III treatment is given a weight of 1.71; so, it is funded at a price of $199.50*1.71=$340.25. The rates are based on direct costs.

The total allocation for operational funding is the sum of the base and incremental volume funding, and the allowance for the equipment (hemodialysis machines) depreciation until 2006.

Infrastructure Funding:

For new programs or significant program expansions, the Ministry has provided funding through an infrastructure envelope as a base adjustment. The infrastructure funding, when provided, is calculated as the difference in the program's expected operating costs and the funding received through the operational funding envelope. This funding may include funding for indirect costs associated with the program expansion, such as lease for space to house a dialysis unit.

Due to the fact that CKD programs have received different infrastructure funding amounts at different times, the implicit rate paid for one weighted unit of CKD services varies across the province. Even though the explicit price of a weighted unit has not changed from the 1997 JPPC price of $199.50, the addition of the infrastructure funding component results in the price of a weighted unit exceeding $199.50 for hemodialysis services.

Incremental Funding:

The incremental funding is the implicit funding provided to the base CKD services through the annual incremental increases to hospital global funding. Since this portion of funding is given through the total hospital economic increases it is not explicit as to how much funding is made available specifically to the CKD program.

One-Time Start-Up Funding

One-time start-up funding is provided for initial staff training and dialysis-related furnishing and equipment (including hemodialysis machines) for new and expanded dialysis unit and home dialysis programs. This does not include the costs associated with the central water purification system for the hemodialysis unit.

One-time operating funding is provided for new dialysis-related furniture and equipment (F&E) for approved new dialysis expansions. Replacement of the dialysis-related (F&E) is the responsibility of the hospital providers.

Dialysis-related equipment is currently funded through the following schedule:

One-time funding is given for dialysis-related equipment in dialysis units at the following rates:

- For centres with total operating station capacity equal to or exceeding 12 stations: $56,061 per approved new operating station

- For centres with a total operating station capacity of less than 12 stations: $60,940 per approved new operating station

- Provision of funding for back-up HD machines is included in the rate at an equivalent of 1 back-up HD machine for 4 operating stations.

One-time operating funding for dialysis-related F&E to support each approved operating station is provided as per following schedule:

- a lump-sum amount of up to $30,000 per hemodialysis machine for each approved operating station;

- a pro-rated lump-sum amount of up to $30,000 for one back-up hemodialysis machine for every four operating stations;

- for centres with total operating station capacity equal to or exceeding 12 (existing plus new stations), a lump- sum amount of up to $18,093 per operating station for designated dialysis-related F&E;

- for centres with a total operating station capacity of less than 12 (existing plus new stations), a lump-sum amount of up to $20,940 per operating station for designated dialysis-related F&E.

One-time operating funding for dialysis-related F&E to support home dialysis program is allocated as follow:

- For conventional home hemodialysis: a lump-sum amount of up to $38,000 per patient (up to $30,000 for hemodialysis machine and $8,000 for the water purification system);

- For home daily/nocturnal hemodialysis: a lump-sum amount of up to $40,640 per patient (up to $30,000 for hemodialysis machine, $8,000 for the water purification system, and remaining for designated dialysis-related F&E including centrifuge, ACT machine, moisture sensor/enuresis alarm); and

- a $2,500 one-time funding per patient home initial installation/set up to meet electrical, plumbing, storage and other requirements is provided only to the permanent residence that the patient occupies at the time of home hemodialysis start i.e. does not apply if the patient moves or maintains a secondary/additional residence.

Funding reimbursement associated with the establishment of a CKD centre, including construction of dialysis unit and costs related to a new water system and its installation is guided by the *Ministry of Health and Long-term Care's Cost Share Policy and the Local Share Plan* requirements, as part of the capital project initiative.

Funding required for the non-specialized dialysis-related F&E to support new and expanded dialysis services is addressed within the ministry's broader *Local Cost Share* policy.

(ii) Future Changes

Implementation of the CKD quality-based procedure funding framework will be phased-in over a three year period. Starting in 2012/13, implementation of the CKD quality-based procedure will focus on the CKD services provided by the hospital sector, followed in the second and third year by the community sector which will include CCACs, LTCHs and Hemodialysis Independent Health Facilities (IHFs).

CCO/ORN has developed a CKD QBP funding framework that:

- Provides a clinically meaningful approach to funding (move from reimbursement per service to reimbursement per patient) as per recognized best practice;
- Covers the breadth of services by CKD providers (early identification and disease management, pre-dialysis care, ambulatory dialysis, hospital-led home dialysis, acute inpatient-based dialysis);
- Uses a funding price that appropriately accounts for hospital and patient characteristics and creates incentives for efficiency;
- Supports a shift to community/independent service delivery; and
- Supports early prevention and screening efforts for chronic renal disease.

Starting in 2012/13 the CKD patient-based payment bundles will be phased-in over a two year period. In 2012/13, the four related home dialysis bundle payments will be implemented, which represent approximately 22% of total funding for CKD care in Ontario. It is anticipated that the remaining three bundles: the pre-dialysis, and the two ambulatory in-centre hemodialysis bundles (the conventional and the daily) will be implemented in 2013/14. Funding for new services will be included in the implementation of the patient-based payment bundles to support standardized and evidence-based best practice.

As part of the HSFR initiative, a new standard rate (increase) replacing the outdated 1997 funding rate will be applied to all CKD services (one-time CKD volumes) starting in 2012/13. For those hospitals whose total identified CKD base funding does not provide for all base volumes at the new rate of $263/weighted unit (40th percentile OCCI rate), "top-up" funding is being provided to bring the total funding for all base volumes to this minimum rate level.

The first step in aligning quality expectations and funding under one accountability agreement is being initiated in 2012/13 with the transfer of hospital base funding for home dialysis services from the LHINs to CCO/ORN. The CKD base funding transfer supports the implementation of patient-based funding aligned with the *ECFA* strategy.

The Ministry continues to work closely with CCO/ORN and clinical experts in the continued development and implementation of a patient-based funding model for CKD in Ontario.

(b) CKD Bundled and Unbundled Framework

The CKD patient-based funding model developed by CCO/ORN has two components which are both 'price x volume' models:

- **Patient Based – Bundled Services**: Annual Predictable Cost Per Patient Type (Cost per service **X** predictable services per patient **X** # patients per type)

- **Service Based Funding**: Cost of additional unpredictable services (cost per service **X** # services provided)

The PBF component is a bundled payment, based on best practice, which covers the costs of all services required by a standard patient for a year's worth of a particular CKD treatment. The framework includes seven (7) annual patient-based payment bundles as follow:

- Pre-dialysis bundle;
- Home Peritoneal Dialysis – Continual Cycler Peritoneal Dialysis/Automated Peritoneal Dialysis (CCPD/APD);
- Home Peritoneal Dialysis - Continuous Ambulatory Peritoneal Dialysis (CAPD);
- Home Hemodialysis -Conventional;
- Home Hemodialysis - Daily/Nocturnal;
- Ambulatory In-Centre Hemodialysis –Conventional; and
- Ambulatory In-Centre Hemodialysis –Daily.

The services contained within the bundles for each of these modalities were determined by CCO/ORN Clinical Advisory Committee (CAC). The CAC is composed of seven Ontario Nephrologists who provide advice on clinical practice and quality care.

The service-based funding is a "fee-for-service" model to reimburse for unpredictable services. This model works the same way that the current operating funding model does. The unbundled services include:

CKD Home Unbundled Services:

- Home visits – Hours of services by Nurse and/or Technician - Initial and Follow-up;
- In-hospital Peritoneal Dialysis exchanges;
- Home Paediatric Peritoneal Dialysis –CCPD / APD;
- Training and Retraining Days of Patients on either CAPD or CCPD; and
- Training and Retraining Days of Home HD and Self-care HD patients

CKD In-Facility Unbundled Services

- Follow-up Clinic Visit for Satellite or Independent Health Facility (IHF) patients;
- Nephrology Clinic Visit;
- Education Clinic Visit

- Dialysis (Body/Vascular) Access Clinic Assessment;
- Vascular Graft insertion;
- Central Venous Catheter – Temporary and permanent insertion;
- Arterio-Venous Fistula insertion;
- Peritoneal Dialysis Catheter insertion;
- In-centre Hemodialysis for visiting patients;
- In-centre Hemodialysis for Peritoneal Dialysis patients;
- Acute Hemodialysis treatment; and
- Continuous Renal Replacement Therapy (CRRT)/Slow Low Efficient Daily Dialysis (SLEDD)

Implementation of home bundle payments represents the least risk for implementation in 2012/13 given that the home dialysis maintenance associated payment is already provided in the form of an annualized patient-based funding rate. It is anticipated that the remaining three bundles, the pre-dialysis, and the two ambulatory in-centre hemodialysis bundles (the conventional and the daily) will begin implementation in 2013/14.

A complete detailed list of CKD services funded in 2012/13 is included under section (e) Price.

(c) Data Sources

Multiple data sources, both financial and clinical, were used to develop the funding model for CKD. The data sources by calculation are:

Carve-Out:

- 2010/11 OCCI
- OHFS
- DAD
- NACRS
- Ministry financial records on base and incremental funding allocation to hospitals from 2000-2011
- Ministry Provincial Programs records on CKD weighted volumes from 2000-2011
- Ministry Provincial Programs records on CKD infrastructure and equipment funding from 2000-2011

Price:

- 2010/11 OCCI Data for chronic hemodialysis treatments

- 1997 JPPC Report "An Approach to Funding End Stage Renal Disease" weighted schedule

- 2008 JPPC Report: "Review of the Micro-Costing Methodology and Recommended Rates for Chronic Kidney Disease Program in Hospitals"

Volume:

- WERS database supplemented with CCO/ORN data collection

- CCO/ORN Ontario Renal Reporting System (ORRS)

(d) Carve-out

Total CKD Funding Amount through Priority Services (Provincial Program)

Until 2011/12, CKD program base funding made up a portion of the global budgets of hospitals that provide CKD services. Base funding provided from Ministry Priority Services (Provincial Programs) for the CKD program is comprised of operating funding, infrastructure funding and incremental funding. CKD base funding as part of the hospital global budget applies only to hospitals (26 CKD Regional Programs and 5 Satellites) who are receiving funding directly from either the LHINs and CCO/ORN since 2010/11; thus excluding satellite hospitals that receive funding from a hospital CKD Regional Program through paymaster accounting.

Through a detailed review process of the CKD funding allocated through Ministry Priority Services (Provincial Programs), the CKD base funding envelope from Ministry Priority Services for CKD program is estimated to be approximately $510 million in 2011/12; an additional one-time funding volume of approximately $45 million has been also provided in 2011/12 to HSPs through CCO/ORN.

In 2012/13, the CKD program funding will be excluded from the 2010/11 data used in HBAM to ensure that the funding from CKD services is only flowing through the QBP funding initiative.

(i) Approach to identify the total CKD funding provided through Ministry Priority Services

1. Determine the amount of volume funding (operational funding) given to each directly funded hospital (26 regional programs and 5 satellites) from 2000/01 to 2011/12.
2. Determine the amount of additional CKD program funding (infrastructure funding) allocated to each directly funded hospital (26 regional programs and 5 satellites) from 2000/01 to 2011/12.
3. Determine the formula funding increases (incremental funding) to hospital global budgets of the the directly funded hospitals (26 regional programs and 5 satellites) from 2000/01 to 2011/12.
4. Calculate the base funding received by each program in 2011/12, accounting for implicit increases to the program budget as a result of formula funding increases to the hospital global budgets.
5. Add the four funding components to give the total CKD base funding provided through Priority Services, which is estimated at over $510M base funding and $45.6M one-time in 2011/12.

Carve - Out

HSFR will shift funding from the current predominantly base funding system towards a model whereby all funding will be provided through one 'price x volume' allocation approach. Alignment of quality expectations and funding under one accountability agreement is significant towards achieving expected improvements under the HSFR initiative.

CCO/ORN is responsible for the management of the provincial CKD program. To enable the implementation of the four home patient dialysis bundles by CCO/ORN, a "carve-out" from the hospital global funding budget is being done in 2012/13 to be consistent with the HSFR shift in funding direction. The carve-out process is done as per HSFR "carve-out" definition: "an amount extracted from an HSP's global budget, based on an estimate of what was spent on a procedure or service from the global budget, using that HSP's own costs".

The 'carve-out' exercise for the CKD QBP in 2012/13 is to identify how much funding from the hospital's global budget is spent on the home dialysis related services for the purpose of being removed ('carved-out') from the hospital's global budget and reallocated through the CKD QBP funding initiative by CCO/ORN. The total CKD base funding identified for carve-out in 2012/13 from the hospitals' global budgets is estimated at $102M, using the standard rate of $263/per weighted unit.

(i) Approach to CKD Carve-Out in 2012/13

1. Determine the portion of CKD base volumes associated with home dialysis related services.
2. Determine 2011/12 actual expense through multiplying actual weighted volumes by actual direct cost per weighted unit, at the rate of $263 (40th percentile OCCI rate for direct variable costs).
3. Remove the estimated home base funding amount from the global budgets of each funded hospital, which is to be reallocated through the QBP funding initiative for the home bundles.

As per the HSFR carve-out funding policy direction, further carve-out for the remaining CKD services funded through the hospital global budgets will take place simultaneously with the implementation of the QBP funding inititiave over the next few years.

(e) Price

Base Price

The price for CKD will be set for total direct costs and will be phased in over a two-year period. The base price for CKD in 2012/13 is $263 per weighted unit, which is the 40th percentile price for the variable direct costs of a chronic level II hemodialysis treatment, from the OCCI 2010/11 data. This does not include allied health, laboratory and biomedical engineering direct costs. All other prices for respective services / procedures will be generated using a weighted schedule which is a combination of the weights in the 1997 JPPC report (status quo weights) and modified weights for new CKD services and home dialysis modalities (to reflect historical price increases in past 2 years). In 2012/13, further cost data will be collected and analysed to determine a price for total direct costs to include the allied health, laboratories services, biomedical engineering and fixed direct costs.

Price (Rate) Adjustment

In 2012/13, prices for CKD will not be adjusted based on facility characteristics or patient acuity as the ORN's cost analysis shows no significant difference in costs based on facility or patient characteristics with the exception of the patient's age. ORN's cost analysis has shown that age may affect the cost of in-facility hemodialysis. Further analysis is being done to inform the adjustment of the facility level rates for the in-facility hemodialysis bundles. In 2013/14, a price adjustment will be made to the in-centre bundles based on patient age. Future phases of the HSFR implementation may include additional price adjustments if data analysis indicates that there are cost differentials.

The following is the 2012-13 price list for the approved CKD services implemented through the first phase of the QBP:

Chronic Kidney Disease Quality-based Procedure
2012-13 Funding Rate Schedule

Service	Rates	Weights
Pre-dialysis	$241.40	0.92
Follow-up	$213.04	0.81
Nephrology	$120.98	0.46
Home Nursing Hours of Service	$376.08	1.43
Home Technician Hours of Service	$376.08	1.43
Chronic Hemodialysis Level I	$178.84	0.68
Chronic Hemodialysis Level II	$263.00	1.00
Acute Hemodialysis Level III	$449.72	1.71
Hemoperfused*	-	-
CRRT	$707.48	2.69
CAPD	$27,945.02	106.25
CCPD Adult	$36,993.87	140.66
CCPD Pediatric	$22,990.38	87.42
Home Hemodialysis	$20,471.81	77.84
Home Nocturnal Daily Hemodialysis	$32,794.00	124.69
Peritoneal Equilibrium CAPD/CCPD	$334.00	1.27
In-Hospital Peritoneal Exchanges**	$42.08	0.16
In Hospital CAPD Exchanges	-	-
In Hospital APD Exchanges (New)	-	-
Days of Training - CAPD	$449.72	1.71
Days of Training - CCPD	$476.04	1.81
Days of Training - Home/Self Care H	$476.04	1.81
Vascular Graft	$1,191.40	4.53
Central Venous Catheter-Temp	$223.56	0.85
Central Venous Catheter-Perm	$412.92	1.57
AV Fistula	$498.44	1.90
Peritoneal Dialysis Catheter	$668.02	2.54
Education Clinic Visit	$100.00	0.38
Dialysis (Body/Vascular) Access Clinic Assessment	$80.00	0.30
Measure HD Blood Access Flow	$23.23	0.09
Assessment of Dialysis Adequacy/Kinetic Modeling	$37.54	0.14

	Service Weight	Best Practice Volume	Bundle Weight	Rate
				263
A. Home PD (APD)			**147.08**	**38,681.16**
Maintenance APD patients	140.66	1		36,993.87
Peritoneal Equilibrium Test APD	1.27	1		334.00
Assessment of Dialysis Adequacy/Kinetic Modeling	0.14	2		75.07
Follow up dialysis patient clinic visit	0.81	6		1,278.22
B. Home PD (CAPD)			**112.67**	**29,632.31**
Maintenance CAPD patients	106.25	1		27,945.02
Peritoneal Equilibrium Test CAPD	1.27	1		334.00
Assessment of Dialysis Adequacy/Kinetic Modeling	0.14	2		75.07
Follow up dialysis patient clinic visit	0.81	6		1,278.22
C. Home HD Daily/Nocturnal			**168.09**	**44,208.37**
Initial Training				
Home HD (Conventional/Daily) Training - fistula/catheter	1.81	21		9,996.77
Maintenance				
HHD Maintenance (daily/nocturnal)	124.69	1		32,794.00
Follow up dialysis patient clinic visit	0.81	6		1,278.22
Measure HD blood access flow	0.09	6		139.38
D. Home HD Conventional			**121.24**	**31,886.18**
Initial Training				
Home HD (Conventional/Daily) Training - fistula/catheter	1.81	21		9,996.77
Maintenance				
HHD Maintenance (conventional)	77.84	1		20,471.81
Follow up dialysis patient clinic visit	0.81	6		1,278.22
Measure HD blood access flow	0.09	6		139.38

(f) Volume

CKD QBP, including the seven patient based-bundles, will be implemented over 2 years. The volumes of CKD services in each patient modality bundle will be based on best practice, as determined by the ORN's Clinical Advisory Committee. Bundled services and best practice allocations may be refined using improved data, under advisement from the CKD Funding Panel. Though the number of services within bundles is pre-determined, the patient bundle volume will not be limited given the life-support nature of the renal replacement treatment.

CKD program volumes will be determined for each facility using projected volumes for each bundle modality and unbundled service. The volumes for the number of bundled and unbundled services for 2012/13 have been projected by the CCO/ORN in consultation with the CKD providers using their clinical data. Volumes will be allocated by CCO/ORN at the hospital CKD Regional Program level and the CKD Regional Program will be responsible for making the hospital-level allocation decision.

(i) CCO/ORN Volume Management

CCO/ORN will develop the provincial plan, which will include capacity planning by CKD providers (hospitals, and others e.g. LTCHs, CCACs, IHFs) for all the CKD services. As part of the CCO/ORN quarterly review process, volumes are discussed and activity monitored by CCO/ORN with each CKD provider. In-year volume adjustments and year-end volume reconciliations will continue to be done under respective accountability agreements, CCO/ORN-HSPs and Ministry-CCO/ORN.

The funding and volumes for services allocated to the HSPs will support evidence-based best practice toward improving the quality of care.

The volumes for the number of bundled and unbundled services for 2012/13 have been projected by CCO/ORN in consultation with the HSPs. These projected volumes will be used to determine facility level allocations in 2012/13, 2013/14 and 2014/15.

(g) Corridors

No mitigation corridors have been placed on the CKD QBP funding in 2012/13 since large increases and decreases in facility level funding are mainly due to changes in projected volumes. Dialysis services are life sustaining services. When funding increases are due to volume growth, a mitigation would limit the access to these services and may put health of people who need the CKD services at risk.

Other CKD mitigation strategies that are being used to assist the facilities in the transition to the new funding model, including :

- Multi-year phased implementation;
- Putting a "floor of zero" on one-time volumes (i.e. no facilities will lose base volumes in 2012-13); and
- In-year volume adjustments and year-end volume reconciliation by CCO/ORN will continueto be done under respective accountability agreements, which will be integral to the mitigation strategy for these life-sustaining services

(h) Accountability

Currently the CKD funding is provided to the hospitals under two accountability agreements: LHIN-Hospital (H-SAA) for the base funding and CCO/ORN-Hospital (CKD Management Agreement) for the incremental funding since 2010/11.

To align quality expectations and funding, one accountability agreement will be developed between CCO/ORN and the hospitals for all CKD funding and will be phased in for completion targeted in 2013/14.

Starting in 2012/13, a realignment of funding that is currently part of a LHIN-Hospital Agreement for home dialysis bundles and related services (approximately $102 million) is being transferred to ORN for reallocation as part of the implementation of the CKD QBP funding initiative.

Base funding from the hospital's global budget for the remaining CKD base volume services will be 'carved-out' over the next few years and be moved to CCO/ORN to be managed under the CCO–*CKD Provider Management Agreement* during the implementation of the CKD QBP initiative.

Part of the CKD QBP initiative, ministry CKD funding to other health sectors, (e.g. CCACs, LTCHs) to support CKD patients on dialysis will also be revised

(i) Conditions of Funding

The Ministry provides CKD program funding to CCO, which is responsible to allocate funds to HSPs to deliver CKD services. The *Chronic Kidney Disease Management Agreement* between CCO/ORN and each HSP outlines the details of funding conditions, including the quality and reporting requirements.

Any funds not used for the specific intended purpose will be subject to recovery by the CCO/ORN from the HSPs and thereafter by the Ministry from CCO/ORN.

Any allocated volumes that are not performed within the intended fiscal year will be subject to recovery.

(j) Quality Targets

CCO/ORN will outline quality targets for the funding allocated to HSPs in its *Chronic Kidney Disease Management Agreement* with each HSP.

(k) Cash Flow

Until 2011/12, CKD base funding makes up a portion of the hospital global budgets. As a QBP in the PBF envelope, a carve-out for the CKD program funding will be excluded from the 2010/11 data used in HBAM to ensure that the funding from CKD services is only flowing through the QBP funding initiative.

The CKD base funding being 'carved-out' through implementation of the CKD QBP will be transferred from the LHINs to CCO/ORN, starting in 2012/13. This will allow CCO/ORN to align quality expectations and funding.

Commencing in fiscal year 2012/13, CCO/ORN will be responsible for all the funding for the home dialysis related services and the remaining one-time funding for CKD services.

Payments to CCO/ORN are based on executed Minister and Assistant Deputy Minister approval letters which provide the authority for the payment as well as state the terms and conditions of the funding. Payments are processed through regularly scheduled semi-monthly EFT.

CCO/ORN will then be responsible for communicating the details of the CKD funding to the HSPs and the LHINs. CCO/ORN payments to HSPs will be done semi-monthly, based on the signed *CKD Management Agreement* between CCO/ORN and the HSP. CCO payments are made to the hospital corporation which is responsible for managing and paying the associated 'hospital satellites'.

(l) Adjustments/Reallocation, Reconciliation and Recovery

Funding letters and accountability agreements, provide the authority to conduct in-year adjustments/reallocations and year-end reconciliations, as well as to recover unspent funds and/or funds not used for their intended purposes. These processes are important for cash management purposes.

Key Principles:

- Volumes will be identified provincially and at the HSP-level through the initial program allocation at the start of the year;
- A mid-year reallocation process will be provided for the opportunity for volumes to be shifted between HSPs; and
- Any funds not used for their specific intended purpose will be subject to recovery by the CCO/ORN from the HSP and by Ministry from CCO/ORN.

Data Availability and Timelines:

CCO/ORN and their HSPs will be required to submit volume performance data in the SRI and the Ontario Renal Reporting System (ORRS) for all CKD services as per their respective Agreements.

CCO/ORN and CKD Providers:

The *CKD Management Agreement* is the legal contract between CCO/ORN and the CKD service providers. It outlines the specific service, quality and reporting requirements of the provider in return for the funding they receive. CCO/ORN has a *CKD Management Agreement* with each directly funded hospital (26 CKD Regional Programs and 5 satellites).

CCO/ORN will outline details of its in-year and annual reconciliation and recovery process for CKD funding to HSPs in its *CKD Management Agreement* with each HSP.

(i) Opening Allocation

The overall target (funded) volumes for CKD Services to be performed by the CKD Service Provider are set out in Schedule A of the *CKD Management Agreement* between CCO/ORN and HSP. The target volumes outlined in Schedule A are based on volume delivery performance of previous fiscal years, forecasted growth and, discussions with the provider regarding local conditions or circumstances that may impact performance

(ii) In-Year Reallocation

The in-year reallocation process is important for cash management purposes as it re-deploys the initial program allocation to better match with the CKD provider's projected in-year activity.

The in-year reallocation process includes a detailed CCO/ORN review of the CKD provider's quarterly reports submitted through the ORRS and the SRI. The reported estimated actual and forecasted volumes to year-end are reviewed and CKD providers are contacted for clarification and/or additional information as required. This process also serves to minimize year-end settlement payouts and recoveries that may otherwise have resulted.

(iii) Year-End Reconciliation and Recovery

A year-end reconciliation/recovery process is undertaken upon completion of the fiscal year to determine whether the CKD service provider's year-end actual volumes met the target (funded) volumes.

The year-end reconciliation and settlement process is also important for cash management purposes as it matches the hospitals' initial allocation (funded) with the hospitals' actual year-end activity. In 2012/13 (and moving forward), two data sources will be used to complete the in-year reallocation and year-end reconciliation; data reported by the CKD Service Provider through the ORRS and data reported by the CKD Service Provider through the Ministry's

SRI – Year-End Supplementary reports. Calculating the variance between the actual volume and the funded activity results in a net settlement amount (i.e. payout or recovery as applicable). Payments may be made if the CKD Service Provider exceeds their target volumes, based on the funding available through the reconciliation process.

(iv) ORN Quarterly Quality Review Cycle

The allocation, reallocation and reconciliation process is supported by CCO/ORN's quarterly quality review cycle. CCO/ORN conducts quarterly performance reviews to assess the CKD Service Provider's performance including a review of the CKD providers' actual and target CKD services volumes.

Upon completion of this process, payout and recovery letters provide the authority to reallocate funding.

Ministry and CCO/ORN

The Ministry will conduct an in-year (quarterly) and year-end review for the purpose of reconciliation of the provincial funding allocated to CCO/ORN for service volumes. Upon completion of this process, payout and recovery letters provide the authority to reallocate funding.

2.3.3 Primary Unilateral Hip Replacement

(a) Introduction

There is clear clinical evidence to support best practices for hip replacement surgery and rehabilitation. The Ministry is reforming both the surgical and rehabilitation components for primary unilateral hip replacement procedures to increase quality, reduce variation, and improve patient outcomes.

HSFR will implement best practices and evidence-based care for surgery and rehabilitation components of the patient clinical pathway for primary unilateral hip replacements; improve quality of care and patient outcomes; and standardize prices for surgery and rehabilitation.

The funding and volumes for services allocated to the LHIN are for the purpose of:

a. Increasing the quality of care delivered for primary unilateral hip replacement.
b. Increasing the appropriateness of the care setting, the volumes allocated, and utilization associated with primary unilateral hip replacement.

(i) 2011/12 Policy

Primary unilateral hip replacement and inpatient rehabilitation were previously funded through hospital base or Ontario's WTS, with significant variation in case cost between hospitals. HSFR shifts funding from the current predominantly global funding system towards PBF where payments follow the patient for the services provided.

(ii) Future Changes

HSFR implementation will encapsulate a multi-year phased approach. Year 1 changes to primary unilateral hip replacement include a 'price and volume' change as well as the introduction of the two quality indicators (4.4 day length of stay and 90% discharge to home). Performance will be monitored for Year 1 to mitigate against any issues that may arise. For subsequent years, data will continue to be collected and refined; the Ministry will monitor rates and make adjustments based on best practice evidence, as necessary. Evaluation and expansion of the model will occur as required.

(b) Data Sources

Multiple data sources, both financial and clinical, were used to develop the funding for primary unilateral hip replacement. The data sources by calculation are:

Carve-Out:

- 2010/11 OCCI
- 2010/11 OCDM
- 2010/11 DAD
- 2010/11 NACRS
- 2011/12 hospital-specific incremental funding growth rate

Price:

- Based on 2010/11 OCCI data

Volume:

- 2008/09, 09/10, 10/11 and 11/12 DAD and 2010/11 NACRS. The case volumes and related HBAM Inpatient Grouper weights are based on grouper 320 – Unilateral Hip Replacement and 2011/12 HBAM Inpatient Grouper methodology

(i) Inpatient Rehabilitation

Multiple data sources, both financial and clinical, were used to develop the funding for primary unilateral hip replacement inpatient rehabilitation. The data sources by calculation are:

Carve-Out:

- 2010/11 OCDM
- 2009/10 DAD
- 2010/11 DAD
- 2010/11 NRS
- 2011/12 hospital-specific incremental funding growth rate

Price:

- 2009/10 OCCI data

Volume:

- 2008/09, 2009/10, 2010/11 and 2011/2012 NRS data and 2011/12 Orthopaedic Quality Scorecard

(c) Carve-out

Primary unilateral hip replacement funding makes up a portion of the global funding of hospitals. In 2012/13, this primary unilateral hip portion of the global funding has been identified through a "carve-out".

In 2012/13, primary unilateral hip funding will also be excluded from the 2010/11 data used in HBAM to ensure that the funding for primary unilateral hip replacement is flowing through the QBP funding only.

The total funding envelope available for primary unilateral hip replacement in 2012/13 consists of the "carved-out" funding as well as the funding formerly associated with primary unilateral hip replacement under the WTS.

(i) Approach

1. Adjusted cost per weighted case for outliers, limiting to within 10th and 90th percentile of unit costs
2. Determine 2010/11 actual expense through multiplying actual weighted cases by actual direct cost per weighted case
3. Adjusted for growth to 2011/12

(ii) Inpatient Rehabilitation

Primary unilateral hip replacement inpatient rehabilitation funding makes up a portion of the global funding of hospitals. In 2012/13, this primary unilateral hip inpatient rehabilitation portion of the global funding has been identified through a "carve-out".

In 2012/13, primary unilateral hip inpatient rehabilitation funding will also be excluded from the 2010/11 data used in HBAM to ensure that the funding for primary unilateral hip inpatient rehabilitation is flowing through the QBP funding only.

(iii) Inpatient Rehabilitation Approach

1. Use OHIP number to link inpatient rehabilitation patients in the DAD
2. Determine 2010/11 actual expense through multiplying actual weighted cases by actual direct cost per weighted case
3. 2011/12 carve out is calculated by applying the 2010/11 unit cost (grown to 2011/12 using 1.5% inflation) to the estimated 2011/12 volumes

(d) Price

The price for primary unilateral hip replacement (acute) will be set for total direct costs The base price 2012/13 is $7,071/case, which is the 40th percentile price of all cases from the OCCI 2010/11 data.

(i) Inpatient Rehabilitation

The price for primary unilateral hip replacement inpatient rehabilitation will be set for total direct costs. The base price 2012/13 is $6,074/case, which is the 40th percentile price from the OCCI 2009/10 data. To control for outlier cases, the only cases used for this distribution are those OCCI hip inpatient rehabilitation cases that occurred in the LHINs that meet the 90% discharge to home quality target. These rehabilitation cases were admitted within 30 days after discharge from acute.

(ii) Rationale

Prices set at the 40th percentile will encourage system efficiency as best practices are incorporated into the price for HSFR years 2 and 3.

(e) Volume

Funding for primary unilateral hip surgery and rehabilitation will be allocated on a price per volume approach. Volumes are allocated at the LHIN-level and LHINs are responsible for making HSP-level allocation decisions.

(i) LHIN Volume Management

The LHINs have the authority to reallocate primary unilateral hip replacement volumes and the associated rehabilitation volumes between their respective service providers. In doing so the LHIN is committed to:

1. Ensuring that care is delivered to the patient in a care setting that best meets the needs of the patient,
2. Ensuring that volumes are distributed effectively across the LHIN, and
3. Ensuring that service utilization is being optimized across the LHIN.

Specific conditions related to LHIN volume management are set out in the Conditions of Funding schedules associated with the QBP funding letter.

(ii) Initial Volume Allocation Approach for Acute Services

1. The 2011/12 volume for primary unilateral hips was calculated by growing the 2010/11 actual volume (from CIHI-DAD) using a two year historical average growth (based on growth from 2008/09 to 2009/10 and 2009/10 to 2010/11)
2. The 2011/12 provincial total primary unilateral hip volume is distributed to facilities using a three year average share of volumes (based on 2008/09, 2009/10, and 2010/11)
3. In certain cases, 2010/11 NACRS volumes are also added

(iii) Final Volume Allocation Approach for Acute Services

1. Based on 2011/12 DAD Accountability Cut and 2011/12 NACRS

(iv) Initial Volume Allocation Approach for Inpatient Rehabilitation

1. The 2010/11 volume data is collected from the NRS
2. The 2011/12 inpatient rehabilitation volumes were calculated using the two year provincial average growth and applying it to 2010/11 actual inpatient rehabilitation volumes. The 2011/12 provincial total rehabilitation hip volumes were allocated to hospitals using a three year average share of volumes (based on 2008/09, 2009/10, and 2010/11)
3. The Q2 2011-12 Orthopaedic Quality Scorecard, which highlights the proportion of patients discharged from acute inpatient care to home by LHIN, was used to estimate the 2011/12 inpatient rehabilitation volumes at the LHIN- and provincial-level
4. The provincial total inpatient rehabilitation volume calculated in 3 was split to the LHIN level using the hospital-level three year average share distribution calculated above in 2
5. LHIN level volumes calculated in 4 were then allocated to hospitals using the hospital share within the LHIN (calculated in 2). If there is no volume in 2010/11, hospital would not get any volume in 2011/12
6. The final 2011/12 hospital rehabilitation hip/knee volume were determined using the lower volume between 5 and 2 as the final volume for hospital
7. The difference between steps 5 and 2 is added to home care primary unilateral hip replacement and primary unilateral/knee replacement QBP allocation.

(v) Final Volume Allocation Approach for Inpatient Rehabilitation

1. To identify inpatient rehab discharged in 2011/12, primary unilateral hip replacement cases were identified in the DAD and NACRS (for certain facilities only) for 2010/11 and 2011/12 and linked

to NRS data using encrypted health card numbers. To be counted in, a case had to be admitted for inpatient rehab within 30 days of acute discharge.

(f) Corridors

A funding corridor of ± 15% will be set to maintain system stability in 2012/13.

(g) Use of Funding

The funding allocated pursuant to the primary unilateral hip replacement QBP will be used solely for the purpose of providing primary unilateral hip replacement and the associated rehabilitation services.

The expectation is that as part of the funding commitment the LHIN and hospitals will:

- Work towards meeting the provincial quality targets (4.4 day length of stay and 90% discharge to home)
- Examine quality and wait time trends throughout the year to determine areas of need and local and/or LHIN based solutions which may include redistribution of cases
- Continue to report into the SRI, the WTIS, and the SETP
- Continue to work towards reducing wait times by continuously managing wait lists for primary unilateral hip replacement procedures reported to the WTIS
- Maintain their current mix of complex patients, or increase their mix such that it responds to local need
- Ensure that the delivery of these surgical and rehabilitation volumes will not result in a decrease in other service areas

Any allocated volumes that are not performed in the year ending March 31, 2013 will be subject to recovery.

Specific conditions related to the use of funding are set out in the Conditions of Funding schedules associated with the QBP funding letter.

(h) Quality Targets

The Ministry has set a target of an average 4.4 day length of stay for patients who receive a primary unilateral hip replacement. The Ministry will be assessing current LHIN performance this fiscal year in order to determine an appropriate LHIN-specific target. As such, the LHIN will be assessing hospital performance to determine hospital-specific targets in order for the LHIN to meet its target as established by the Ministry.

The Ministry has set a target of 90% for rate of home discharges for patients who receive a primary unilateral hip replacement, with post-acute rehabilitation provided in outpatient, home-based and community-based settings (Discharge Type = 04, 05). The Ministry will be assessing current LHIN performance throughout this fiscal year in order to determine an appropriate LHIN-specific target. As such, the LHIN will be assessing hospital performance to determine hospital-specific targets in order for the LHIN to meet its target as established by the Ministry.

The quality conditions are as follows listed below:

Condition	Target
Average Length of Stay in the Acute Phase	4.4 days
% of Patients Discharged to Home/Community	90%

The LHINs and hospitals are expected to continue to ensure they work towards meeting the WTS access targets for all primary unilateral hip replacements. LHINs are also expected to continue to work towards meeting their Ministry-LHIN Performance Agreement (MLPA) targets for all primary unilateral hip replacements.

The Ontario Wait Time targets are as follows:

Priority Level	Hip & Knee Replacement
I	7 days
II	42 days
III	84 days
IV	182 days

As a further measure of quality, the hospitals are expected to ensure that the electronic monthly reporting requirements to the CJRR which was implemented April 1, 2012. (Detailed data submission specifications for the CJRR MDS have been provided to the hospital by CIHI).

(i) Cash Flow

Payments to hospitals are based on executed Minister and Assistant Deputy Minister approval letters which provide the authority for the payment as well as stating the terms and conditions of the funding.

Payments are processed through regularly scheduled semi-monthly EFT.

Payments are made to the "hospital corporation" which are responsible for managing and paying their associated "hospital sites".

(j) Reallocation, Reconciliation, and Recovery

Funding letters provide the authority to conduct reallocations, reconciliations and to recover unspent funds and/or funds not used for their intended purposes.

Key Principles:

- Volumes will be identified provincially and at the LHIN-level through the allocation at the start of the year

- A mid-year reallocation process will be provided for the opportunity for volumes to be shifted between LHINs

- Any funds not used for their specific intended purpose will be subject to recovery by the Ministry

Data Availability and Timelines:

LHINs and their HSPs will be required to submit performance data in the SRI for all services (surgery and inpatient rehabilitation).

R**eallocation, Reconciliation and Recovery Processes:**

1) Intra-LHIN Reallocation Process:

   - LHINs have the authority to move volumes between their HSPs within QBP services. These reallocations can happen at any time throughout the year but must be communicated to the Ministry for tracking purposes

     Ex: Move primary unilateral hip replacement volumes at Hospital A to Hospital B
     Ex: Move volumes of inpatient rehabilitation for primary unilateral hip replacements at Hospital A to Hospital B
     Ex: Move volumes of primary unilateral hip replacement inpatient rehabilitation at Hospital A to community rehabilitation volumes at the CCAC

   - The process of moving volumes between QBPs (i.e. primary unilateral hip replacement to primary unilateral knee replacement) will occur during the Ministry-led mid-year reallocation process

   - Funds cannot be moved between QBPs funding and remaining WTS funding by the LHINs without Ministry approval

2) Inter-LHIN Reallocation Process:

   - During the mid-year reallocation process volumes will be redistributed across LHINs as necessary. If the LHINs identify QBP volumes that cannot be performed by year end within the LHIN, they will be redistributed to LHINs that identify the need for additional volumes

   - There will continue to be a separate mid-year WTS reallocation process for LHINs that will be independent from the mid-year QBP reallocation process

3) Year-End Recoveries:

The year-end recovery process is important for cash management purposes as it matches the hospitals' allocation with the hospitals' actual year-end activity. Year-end recoveries are performed using the actual volume reported in SRI through Year-End Supplementary reports, which will be confirmed by the LHINs. Calculating the variance between the actual volume and the funded activity results in a net recovery amount. Recovery amounts will be processed against HSPs directly.

Each HSP will have their funded primary unilateral hip replacement volumes reconciled against actual primary unilateral hip replacement volumes performed; any over- or under-performance in any one QBP will not be netted against any other QBPs.

2.3.4 Primary Unilateral Knee Replacement

(a) Introduction

There is clear clinical evidence to support best practices for knee replacement surgery and rehabilitation. The Ministry is reforming both the surgical and rehabilitation components for primary unilateral knee replacement procedures to increase quality, reduce variation, and improve patient outcomes.

HSFR will implement best practices and evidence-based care for surgery and rehabilitation components of the patient clinical pathway for primary unilateral knee replacements; improve quality of care and patient outcomes; and standardize prices for surgery and rehabilitation.

The funding and volumes for services allocated to the LHIN are for the purpose of:

a. Increasing the quality of care delivered for primary unilateral knee replacement.
b. Increasing the appropriateness of the care setting, the volumes allocated, and utilization associated with primary unilateral knee replacement.

(i) 2011/12 Policy

Primary unilateral knee replacement and inpatient rehabilitation was previously funded through hospital base or Ontario's WTS, with significant variation in case cost between hospitals. HSFR shifts funding from the current predominantly global funding system towards the PBF where payments follow the patient for the services provided.

(ii) Future Changes

HSFR implementation will encapsulate a multi-year phased approach. Year 1 changes to primary unilateral knee replacement and inpatient rehabilitation include a price and volume change as well as the introduction of two quality indicators (4.4 day length of stay and 90% discharge to home). Performance will be monitored for Year 1 to mitigate against any issues that may arise. . For subsequent years, data will continue to be collected and refined; the Ministry will monitor rates and make adjustments based on best practice evidence, as necessary. Evaluation and expansion of the model will occur as required.

(b) Data Sources

Multiple data sources, both financial and clinical, were used to develop the funding for primary unilateral knee replacement. The data sources by calculation are:

Carve-Out:

- 2010/11 OCCI
- 2010/11 OCDM
- 2010/11 DAD
- 2010/11 NACRS
- 2011/12 hospital-specific incremental funding growth rate

Price:

- 2010/11 OCCI data

Volume:

- 2008/09, 2009/10, 2010/11 and 2011/12 DAD. The case volumes and related HBAM Inpatient Grouper weights are based on grouper 321 – Unilateral Knee Replacement and 2011/12 HBAM Inpatient Grouper methodology

(i) Inpatient Rehabilitation

Multiple data sources, both financial and clinical, were used to develop the funding for primary unilateral knee replacement inpatient rehabilitation. The data sources by calculation are:

Carve-Out:

- 2010/11 OCDM
- 2009/10 DAD
- 2010/11 DAD
- 2010/11 NRS
- Statistics Canada population growth projections
- 2010 Ministry of Finance population projections update

Price:

- 2009/10 OCCI data

Volume:

- 2008/09, 2009/10, 2010/11 and 2011/12 NRS data and 2011/12 Orthopaedic Quality Scorecard ,

(c) Carve-out

Primary unilateral knee replacement funding makes up a portion of the global funding of hospitals. In 2012/13, this primary unilateral knee portion of the global funding has been identified through a "carve-out".

In 2012/13, primary unilateral knee funding will also be excluded from the 2010/11 data used in HBAM to ensure that the funding from primary unilateral knee replacement is flowing through the QBP funding only.

The total funding envelope available for primary unilateral knee replacement in 2012/13 consists of the "carved-out" funding as well as the funding formerly associated with primary unilateral knee replacement funding under the WTS.

(i) Approach

1. Adjusted cost per weighted case for outliers, limiting to within 10th and 90th percentile of unit costs
2. Determine 2010/11 actual expense through multiplying actual weighted cases by actual **direct** cost per weighted case
3. Adjusted for growth to 2011/12

(ii) Inpatient Rehabilitation

Primary unilateral knee replacement inpatient rehabilitation funding makes up a portion of the global funding of hospitals. In 2012/13, this primary unilateral knee inpatient rehabilitation portion of the global funding has been identified through a "carve-out".

In 2012/13, primary unilateral knee inpatient rehabilitation funding will also be excluded from the 2010/11 data used in HBAM to ensure that the funding for primary unilateral knee replacement inpatient rehabilitation is flowing through the QBP funding only.

(iii) Inpatient Rehabilitation Approach

1. Use OHIP number to link inpatient rehabilitation patients in the DAD
2. Determine 2010/11 actual expense through multiplying actual weighted cases by actual direct cost per weighted case
3. 2011/12 carve out is calculated by applying the 2010/11 unit cost (grown to 2011/12 using 1.5% inflation) to the estimated 2011/12 volumes

(d) Price

The price for primary unilateral knee replacement (acute) will be set for total direct costs. The base price in 2012/13 is $6,254/case, which is the 40th percentile price of all cases from the OCCI 2010/11 data.

(i) Inpatient Rehabilitation

The price for primary unilateral knee replacement inpatient rehabilitation will be set for total direct costs. The base price in 2012/13 is $4,872/case, which is the 40th percentile price from the OCCI 2009/10 data. The only cases used for this distribution are those OCCI knee inpatient rehabilitation cases that occurred in the LHINs that meet the 90% discharge to home quality target. These rehabilitation cases were admitted within 30 days after discharge from acute.

(ii) Rationale

Prices set at the 40th percentile will encourage system efficiency as best practices are incorporated into the price for HSFR years 2 and 3.

(e) Volume

Funding for primary unilateral knee surgery and inpatient rehabilitation will be allocated on a price per volume approach. Volumes are allocated at the LHIN-level and LHINs are responsible for making HSP-level allocation decisions.

(i) LHIN Volume Management

The LHINs have the authority to reallocate primary unilateral knee replacement volumes and the associated rehabilitation volumes between their respective service providers. In doing so the LHIN is committed to:

1. Ensuring that care is delivered to the patient in a care setting that best meets the needs of the patient,
2. Ensuring that volumes are distributed effectively across the LHIN, and
3. Ensuring that service utilization is being optimized across the LHIN.

Specific conditions related to LHIN volume management are set out in the Conditions of Funding schedules associated with the QBP funding letter.

(ii) Initial Volume Management Approach for Acute Services

1. The 2011/12 volume for primary unilateral knees was calculated by growing the 2010/11 actual volume (from CIHI-DAD) using a two year historical average growth (based on growth from 2008/09 to 2009/10 and 2009/10 to 2010/11)
2. The 2011/12 provincial total primary unilateral knee volume is allocated to hospitals using a three year average share of volumes (based on 2008/09, 2009/10, and 2010/11)

(iii) Final Volume Management Approach for Acute Services

1. Based on 2011/12 DAD Accountability Cut and 2011/12 NACRS

(iv) Initial Volume Management Approach for Inpatient Rehabilitation

1. The 2010/11 volume data is collected from the NRS
2. The 2011/12 inpatient rehabilitation volumes were calculated using the two year provincial average growth and applying it to 2010/11 actual inpatient rehabilitation volumes. The 2011/12 provincial total rehabilitation knee volumes were allocated to hospitals using a three year average share of volumes (based on 2008/09, 2009/10, and 2010/11)
3. The Q2 2011-12 Orthopaedic Quality Scorecard, which highlights the proportion of patients discharged from acute inpatient care to home by LHIN, was used to estimate the 2011/12 inpatient rehabilitation volumes at the LHIN- and provincial-level
4. The provincial total inpatient rehabilitation volume calculated in 3 was split to the LHIN level using the hospital-level three year average share distribution calculated above in 2
5. LHIN level volumes calculated in 4 were then allocated to hospitals using the hospital share within the LHIN (calculated in 2). If there is no volume in 2010/11, hospital would not get any volume in 2011/12
6. The final 2011/12 hospital rehabilitation knee volume were determined using the lower volume between 5 and 2 as the final volume for hospital

(v) Final Volume Management Approach for Inpatient Rehabilitation

1. To identify inpatient rehab discharged in 2011/12, primary unilateral knee replacement cases were identified in the DAD and NACRS (for certain facilities only) for 2010/11 and 2011/12 and linked to NRS data using encrypted health card numbers. To be counted in, a case had to be admitted for inpatient rehab within 30 days of acute discharge.

(f) Corridors

A funding corridor of ± 15% will be set to maintain system stability in 2012/13.

(g) Use of Funding

The funding allocated pursuant to the primary unilateral knee replacement QBP will be used solely for the purpose of providing primary unilateral knee replacement and the associated rehabilitation services.

The expectation is that as part of the funding commitment the LHIN and hospitals will:

- Work towards meeting the provincial quality targets (4.4 day length of stay and 90% discharge to home)
- Examine quality and wait time trends throughout the year to determine areas of need and local and/or LHIN based solutions which may include redistribution of cases
- Continue to report into the SRI, the WTIS, and the SETP

- Continue to work towards reducing wait times by continuously managing wait lists for primary unilateral knee replacement procedures reported to the WTIS

- Maintain their current mix of complex patients, or increase their mix such that it responds to local need

- Ensure that the delivery of these surgical and rehabilitation volumes will not result in a decrease in other service areas

Any allocated volumes that are not performed in the year ending March 31, 2013 will be subject to recovery.

Specific conditions related to the use of funding are set out in the Conditions of Funding schedules associated with the QBP funding letter.

(h) Quality Targets

The Ministry has set a target of 4.4 days for average length of stay for patients who receive a primary unilateral knee replacement. The Ministry will be assessing current LHIN performance this fiscal year in order to determine an appropriate LHIN-specific target. As such, the LHIN will be assessing hospital performance to determine hospital-specific targets in order for the LHIN to meet its target as established by the Ministry.

The Ministry has set a target of 90% for rate of home discharges for patients who receive a primary unilateral knee replacement, with post-acute rehabilitation provided in outpatient, home-based and community-based settings (Discharge Type = 04, 05). The Ministry will be assessing current LHIN performance throughout this fiscal year in order to determine an appropriate LHIN-specific target. As such, the LHIN will be assessing hospital performance to determine hospital-specific targets in order for the LHIN to meet its target as established by the Ministry.

The quality conditions are as follows:

Condition	Target
Average Length of Stay in the Acute Phase	4.4 days
% of Patients Discharged to Home/Community	90%

The LHINs and hospitals are expected to continue to ensure they work towards meeting the WTS access targets for all primary unilateral knee replacements. The LHIN is also expected to continue to work towards meeting their MLPA targets for all primary unilateral knee replacements.

The Ontario's Wait Time targets are as follows:

Priority Level	Knee & Knee Replacement
I	7 days
II	42 days
III	84 days
IV	182 days

As a further measure of quality the hospitals are expected to ensure that the electronic monthly reporting requirements to the CJRR which were implemented April 1, 2012. (Detailed data submission specifications for the CJRR MDS have been provided to the Hospital by CIHI).

(i) Cash Flow

Payments to hospitals are based on executed Minister and Assistant Deputy Minister approval letters which provide the authority for the payment as well as stating the terms and conditions of the funding.

Payments are processed through regularly scheduled semi-monthly EFT.

Payments are made to the "hospital corporation" which are responsible for managing and paying their associated "hospital sites".

(j) Reallocation, Reconciliation, and Recovery

Funding letters provide the authority to conduct reallocations, reconciliations and to recover unspent funds and/or funds not used for their intended purposes.

Key Principles:

- Volumes will be identified provincially and at the LHIN-level through the allocation at the start of the year

- A mid-year reallocation process will be provided for the opportunity for volumes to be shifted between LHINs

- Any funds not used for their specific intended purpose will be subject to recovery by the Ministry

Data Availability and Timelines:

LHINs and their HSPs will be required to submit performance data in the SRI for all services (surgery and inpatient rehabilitation).

R**eallocation, Reconciliation and Recovery Processes:**

1) Intra-LHIN Reallocation Process:

- LHINs have the authority to move volumes between their HSPs within QBP services. These reallocations can happen at any time throughout the year but must be communicated to the Ministry for tracking purposes

  Ex: Move primary unilateral knee replacement volumes at Hospital A to Hospital B
  Ex: Move volumes of inpatient rehabilitation for primary unilateral hip replacement at Hospital A to Hospital B
  Ex: Move volumes of primary unilateral hip replacement inpatient rehabilitation at Hospital A to community rehabilitation volumes at the CCAC

- The process of moving volumes between QBPs (i.e. primary unilateral hip replacement to primary unilateral knee replacement) will occur during the Ministry-led mid-year reallocation process

- Funds cannot be moved between QBPs funding and WTS funding

2) Inter-LHIN Reallocation Process:

- During the mid-year reallocation process, volumes will be redistributed across LHINs as necessary. If the LHINs identify QBP volumes that cannot be performed by year end within the LHIN, they will be redistributed to LHINs that identify the need for additional volumes

- There will continue to be a separate mid-year WTS reallocation process for LHINs that will be independent from the mid-year QBP reallocation process

3) Year-End Recoveries:

The year-end recovery process is important for cash management purposes as it matches the hospitals' allocation with the hospitals' actual year-end activity. Year-end recoveries are performed using the actual volume reported in SRI through Year-End Supplementary reports, which will be confirmed by the LHINs. Calculating the variance between the actual volume and the funded activity results in a net recovery amount. Recovery amounts will be processed against HSPs directly.

Each HSP will have their funded primary unilateral knee replacement volumes reconciled against actual primary unilateral knee replacement volumes performed; any over- or underperformance will not be netted against any other QBPs.

2.4 Forensic Mental Health

FMH hospitals have little control over the admission of patients. Hospitals and the Ministry have a legal mandate to ensure that individuals referred by the court system are admitted to an appropriate FMH facility for assessment, rehabilitation and/or treatment. Ontario's FMH system comprises 735 beds across 11 hospital sites, nine of which are specialty psychiatric hospitals, covering Secure Forensic and General Forensic security levels.

Given the unique and legally sensitive nature of these services, in 2012/13, funding for forensic mental health will be provided on a global basis to recognize the specialized services provided (including legal and security) and the unpredictable nature of admissions and transfers, as a product of the legal system, including decisions of the Ontario Review Board.

Allocation has been determined using cost data from the MIS/OHRS database combined with OCDM for patients on and off FMH units. The funding is to be used in accordance with existing practice for provision of FMH care and associated services, but HSPs are expected to improve quality and efficiency in line with the overall HSFR applicable to the HSPs other operations.

2.5 Small Hospitals

Small hospitals are defined as those having fewer than 2,700 acute and day surgery weighted cases in any two of the prior three years.

One of the key issues examined in development of the HSFR was the potential need for unique treatment of certain types of HSPs. Small hospitals were identified as requiring a different funding approach, at least in Year 1 of the HSFR. Small hospitals will be exempt from base funding redistribution through HBAM, and their funding will be based on the global funding provided to them in past years. This is intended to ensure funding stability for these HSPs and to acknowledge the specialized role they play within their communities. QBP funding will apply to participating facilities.

Chapter 3: Community Care Access Centres

3.0 Introduction

Home care is known to be "a cost-effective (alternative to) long-term facility care and acute care within an integrated system of care." [1] The general services that CCACs can arrange on behalf of eligible clients include personal support and homemaking, nursing, physiotherapy, occupational therapy, speech language pathology services, social work services, dietetic services, respiratory therapy services, pharmacy services, related medical supplies and equipment and diagnostic and laboratory services. In the home care section of his 2010 report, the Auditor General of Ontario has recommended that CCACs should be funded through a locally assessed, client need approach, rather than the current global funding allocated on an historical basis, to support greater equity in funding and service provision.

With CCACs receiving funding in line with that of medium to large sized hospitals, providing services to over 600,000 Ontarians annually and integrated with the full continuum of care, CCACs must be at the forefront of innovation and accountability for quality, client-centered care. The CCAC model is fundamental to the principles of HSFR. By supporting hospital discharge and providing services at home and in the community, CCAC services promote sustainable health care built on access to quality services, integrated across the local health system.

Objectives of funding reform for CCACs include:

- Improve funding equity across the province;
- Facilitate standardized CCAC service provision across the province;
- Develop an evidence-based approach to ensure that CCAC client needs are being met efficiently; and
- Develop incentives which encourage quality of care, rather than merely higher volume.

3.0.1 2011/12 Policy

CCAC funding was predominantly (94%) provided through a global approach. The global funding supported the full scope of CCAC services, including those provided by their contracted service providers (e.g. nursing and personal support) and by the CCAC itself (e.g. case management). Global funding is based on historical allocation patterns, which have led to inequities in funding and service across the province. This funding approach also limits LHIN's ability to encourage performance improvement.

In addition to other non-global funding, which includes the Aging at Home strategy, CCACs receive funding through the WTS for rehabilitation and related care of clients following hip or knee replacement surgery. Through the WTS, CCACs receive a lump sum payment of $1,500 per client to provide post-acute rehabilitation to most hip and knee clients; in 2010/11, total funding for hip replacement and knee replacement provided to CCACs through the WTS was $14.6M.

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[1] Hollander, MJ, Miller, J, MacAdam, M, Chappell, N and D. Pedlar. 2009. Increasing Value for Money in the Canadian Healthcare System: New Findings and the Case for Integrated Care for Seniors. Healthcare Quarterly, 12 (1). Pg. 38-47.

3.0.2 Future Changes

Starting in 2012/13, a portion of CCAC base funding is adjusted using HBAM. In 2012/13, this will be 10% of the CCAC PBF envelope. In addition, funding provided to CCACs related to rehabilitation for hip replacement or knee replacement clients will be allocated by the LHIN through a 'price x volume' approach.

3.1 Patient-Based Funding Envelope and Global Funding

For 2012/13, the PBF envelope comprises CCAC base funding, less the following funding pots:

- School Health Professional and Personal Support Services;
- Residential Hospice Funding;
- Chronic Kidney Disease; and
- Additional 1.5% from 2011/12 Community Services Funding.

3.2 HBAM Funding

3.2.1 HBAM Funding

The HBAM Home Care model has been developed to introduce an evidence-based approach to CCAC funding. The previous model, prior to enhancements, relied on linkages to acute episodes[2] (which cover approximately 57% of home care clients) to group clients for costing purposes, along with demographic information, rurality and socio-economic status. The other 43% (long-term/chronic home care recipients, without linkage to an acute episode) are grouped primarily on the basis of demographic data, rurality and socio-economic status.

Other key clinical and financial data sources include MIS/OHRS and Home Care Database (which comprises information from the CCACs' Client Health Related Information System), which also inform HBAM. HBAM

[2] Through such data sources as Discharge Abstract Database, National Ambulatory Care Reporting System, oncology and dialysis clinic activity data and Ontario Mental Health Reporting System (inpatient) data.

considers those costs directly related to client services, including nursing, personal support and rehabilitation, as well as indirect costs, which include case management services as well as CCAC overhead.

The model has been refined to incorporate RUG-HC groupers, which is based on client-level RAI-HC information. This provides detail on home care service utilization and need of clients, including those of long-stay home care recipients. Costing information is derived from high quality billing information provided by CCACs. The recently completed CAN-STRIVE study concluded that RAI-MDS/HC and RUG-HC 'explains cost in a reliable way over time and from area to area in the province.'[3]

(a) Corridors

For 2012/13, a corridor of ± 2% is applied to HBAM funding to mitigate funding fluctuations.

3.2.2 Accountability and Conditions of Funding

This funding, including any applicable terms and conditions, will be reflected in the Ministry-LHIN Performance Agreement between the LHINs and the Ministry.

The LHINs are required to maintain financial records for this allocation which must be used for the intended and approved purposes. Unspent funds, and funds not used for the intended and approved purposes, are subject to recovery in accordance with the Ministry's year-end reconciliation policy.

Through the M-SAA process, LHINs and CCACs will negotiate performance targets/outcomes associated with each CCAC's funding.

Notification to the Ministry to flow funding to CCACs by use of the APTS is the responsibility of the LHIN.

3.2.3 Cash Flow

Payments to the CCACs are based on LHIN direction via the APTS. Minister and Assistant Deputy Minister approval letters which provide the allocation to each LHIN provide authority for the payment as well as stating the terms and conditions of the funding.

Payments are processed through regularly scheduled bi-weekly EFT.

[3] Hirdes, J. 2010. CAN-STRIVE Sub-study: Validation of Resource Utilization Groups version III for Home Care (RUG-HC)

3.2.4 Reconciliation and Recovery

Funding letters provide the authority to conduct reconciliations and to recover unspent funds and/or funds not used for their intended purposes.

3.3 Quality-Based Procedure Funding

3.3.1 Primary Unilateral Hip Replacement

(a) Introduction

There is clear clinical evidence to support best practices for hip replacement surgery and rehabilitation. The Ministry is revising both the surgical and rehabilitation components for primary unilateral hip replacement procedures to increase quality, reduce variation, and improve patient outcomes.

HSFR will implement best practices and evidence-based care for surgery and rehabilitation components of the patient clinical pathway for primary unilateral hip replacements; improve quality of care and patient outcomes; and standardize prices for surgery and rehabilitation.

The funding and volumes for services allocated to the LHIN are for the purpose of:

a. Increasing the quality of care delivered for primary unilateral hip replacement rehabilitation
b. Increasing the appropriateness of the care setting, the volumes allocated, and utilization associated with primary unilateral hip replacement rehabilitation

(i) 2011/12 Policy

Primary unilateral hip replacement CCAC rehabilitation was previously funded through base or WTS allocation, with significant variation in case cost between CCACs. HSFR shifts funding from the current global funding plus incremental system toward a PBF model where payments follow the patient for services provided.

(ii) Future Changes

HSFR implementation will encapsulate a multi-year phased approach. Year 1 changes to primary unilateral hip replacement rehabilitation include a ‘price and volume’ change. Performance will be monitored for Year 1 to mitigate against any issues that may arise. For subsequent years, data will continue to be collected and refined; the Ministry will monitor rates and make adjustments based on best practice evidence, as necessary. Evaluation and expansion of the model will occur as required.

(b) Data Sources

Multiple data sources,, financial, statistical and clinical, were used to develop the funding for primary unilateral hip replacement rehabiliation. The data sources are:

For initial allocation

Carve-Out:

- 2010/11 DAD (Discharge Abstract Database),
- 2010/11 NACRS (National Ambulatory Care Reporting System),
- 2010/11 OHFS (Ontario Healthcare Financial and Statistical System), and
- Q2 2011/12 HCD (Home Care Database)

Price:

- 2010/11 DAD,
- 2010/11 NACRS,
- 2010/11 OHFS, and
- Q2 2011/12 HCD

Volume:

- 2008/09, 2009/10 and 2010/11 DAD,
- 2008/09, 2009/10 and 2010/11 NACRS, and
- Q2 2011/12 HCD

For volume update reconciliation

Carve-Out:

- 2011/12 DAD (Accountability Cut),
- 2011/12 NACRS (Accountability Cut),
- 2010/11 OHFS, and
- Q4 2011/12 HCD

Price:

- 2010/11 DAD,
- 2010/11 NACRS,
- 2010/11 OHFS, and
- Q2 2011/12 HCD

Volume:

- 2011/12 DAD (Accountability Cut),
- 2011/12 NACRS (Accountability Cut), and
- Q4 2011/12 HCD

(c) Carve-out

Primary unilateral hip replacement rehabilitation funding makes up a portion of the global funding of CCACs. In 2012/13, this primary unilateral hip portion of the global funding has been identified through a "carve-out".

The total funding envelope available for primary unilateral hip replacement rehabilitation in 2012/13 consists of the "carved-out' funding as well as the funding formerly associated with primary unilateral hip replacement rehabilitation under the WTS.

(d) Price

The price for primary unilateral hip replacement rehabilitation is set for total direct costs. The base price in 2012/13 is $628/case, which is the 40th percentile price for 2010/11 from the Home Care Dataset adjusted for inflation.

Rationale: Price set at the 40th percentile will encourage system efficiency as best practices are incorporated into the price for HSFR years 2 and 3.

(e) Volume

Funding for primary unilateral hip rehabilitation is allocated on a price per volume approach. Rehabilitation volumes will be allocated at the LHIN-level, and the LHIN will be responsible for making allocation decisions for inpatient rehabilitation volumes and community-rehabilitation volumes.

(i) LHIN Volume Management

The LHIN may re-allocate CCAC community rehabilitation QBP funding per the funding letter towards other HSPs of ambulatory rehabilitation, specifically Community Health Centres and hospital outpatient rehabilitation services. The LHIN must submit a proposal to the ministry for approval. In doing so the LHIN is committed to:

1. Ensuring that care is delivered to the patient in a care setting that best meets the needs of the patient,
2. Ensuring that volumes are distributed effectively across the LHIN, and
3. Ensuring that service utilization is being optimized across the LHIN.

Specific conditions related to LHIN volume management are set out in the Conditions of Funding schedules associated with the QBP funding letter.

(ii) Initial Volume Allocation Approach

1. 2011/12 community hip rehab volumes were estimated by applying the two year provincial average historical volume growth (rehab hip: 5.16%) to 2010/11 actual community rehab volumes.

2. Decreased hospital inpatient rehabilitation hip volumes were added to the 2011/12 community rehab volume.
3. Hip volumes were allocated to the LHINs using a three year (2008/09, 2009/10 and 2010/11) average share of volumes.

(iii) Final Volume Allocation Approach

1. Actual volumes for hips in 2011/12 were used.

(f) Corridors

A funding corridor of ± 15% will be set to maintain system stability.

(g) Use of Funding

The funding allocated pursuant to the primary unilateral hip replacement QBP for rehabilitation services will be used solely for the purpose of providing rehabilitation services for primary unilateral hip replacement patients.

The LHIN will reallocate and recover appropriate volumes both in-year and at year-end.

Funding associated with community rehabilitation volumes not completed by fiscal year end will be recovered by the Ministry. Year-end recoveries will be calculated by taking the community rehabilitation volumes allocated and subtracting the community rehabilitation volumes completed as reported through the SRI.

As part of the funding commitment, the Ministry will be expecting that the CCAC report the encrypted client-level data through SRI/Client Health and Related Information System (CHRIS) to their LHIN for the periods of April 1 to September 30 and October 1 to March 31. (Note: the performance data requested and/or reporting period may be amended at a later date).

Specific conditions related to the use of funding are set out in the Conditions of Funding document associated with the QBP funding letter.

(h) Quality Targets

The Ministry has introduced a quality target rate of 90% for patients discharged to home for primary unilateral hip replacement surgeries. As such, most LHINs will see a greater number of patients seeking rehabilitation services from the CCAC. It is expected that the CCACs work with the LHINs to build the appropriate capacity to meet the needs of the communities with the LHINs.

(i) Cash Flow

Payments to the CCACs are based on LHIN direction via the APTS. Minister and Assistant Deputy Minister approval letters which provide the allocation to each LHIN provide authority for the payment as well as stating the terms and conditions of the funding.

Payments are processed through regularly scheduled bi-weekly EFT.

(j) Reallocation, Reconciliation, and Recovery

Funding letters provide the authority to conduct reallocations, reconciliations and to recover unspent funds and/or funds not used for their intended purposes.

Key Principles:

- Volumes will be identified provincially and at the LHIN-level through the allocation at the start of the year

- A mid-year reallocation process will be provided for the opportunity for volumes to be shifted between LHINs

- Any funds not used for their specific intended purpose will be subject to recovery by the Ministry

Data Availability and Timelines:

LHINS and their HSPs will be required to submit performance data in the SRI for community rehabilitation.

R**eallocation, Reconciliation and Recovery Processes:**

1) Intra-LHIN Reallocation Process:

   - LHINs have the authority to move volumes between their HSPs within QBP services. These reallocations can happen at any time throughout the year but must be communicated to the Ministry for tracking purposes. Ex: Move volumes of primary unilateral hip inpatient rehabilitation at Hospital A to community rehabilitation volumes at the CCAC

2) Inter-LHIN Reallocation Process:

   - During the mid-year reallocation process, volumes will be redistributed across LHINs as necessary. If the LHINs identify QBP volumes that cannot be performed by year end within the LHIN, they will be redistributed to LHINs that identify the need for additional volumes

3) Community Rehabilitation Reconciliation Process:

   - The mid-year reallocation process will also be used to facilitate the process of moving rehabilitation volumes across LHIN boundaries when patients receive surgery in one LHIN but receive rehabilitation in another. This will ensure that LHINs are properly funded for volumes performed within their boundaries

   - The LHINs will be required to track the following information for this reconciliation process:

     1) The number of surgical cases their hospitals performed
     2) The number of inpatient rehabilitation their hospitals performed
     3) The number of community rehabilitation volumes performed within their LHIN for patient who received surgery within the LHIN
     4) The number of community rehabilitation volumes performed within their LHIN for patients who received surgery outside of their LHIN

4) Year-End Recoveries:

The year-end recovery process is important for cash management purposes as it matches the CCAC's allocation with the CCAC's actual year-end activity. Year-end recoveries are performed using the actual volume reported in SRI through Year-End Supplementary reports, which will be confirmed by the LHINs. Calculating the variance between

the actual volume and the funded activity results in a net recovery amount. Recovery amounts will be processed against HSPs directly.

Each HSP will have their funded primary unilateral hip replacement rehabilitation volumes reconciled against actual primary unilateral hip replacement rehabilitation volumes performed; any over- or underperformance will not be netted against any other QBPs.

3.3.2 Primary Unilateral Knee Replacement

(a) Introduction

There is clear clinical evidence to support best practices for knee replacement surgery and rehabilitation. The Ministry is reforming both the surgical and rehabilitation components for knee replacement procedures to increase quality, reduce variation, and improve patient outcomes.

HSFR will implement best practices and evidence-based care for the community rehabilitation component of the patient clinical pathway for primary unilateral knee replacements; improve quality of care and patient outcomes; and standardize prices for surgery and rehabilitation.

The funding and volumes for services allocated to the LHIN are for the purpose of:

a. Increasing the quality of care delivered for primary unilateral knee replacement rehabilitation.
b. Increasing the appropriateness of the care setting, the volumes allocated, and utilization associated with primary unilateral knee replacement rehabilitation.

(i) 2011/12 Policy

Primary unilateral knee replacement surgeries were previously funded through base or WTS allocations, with significant variation in case cost between CCACs. HSFR shifts funding from the current global funding plus incremental system towards a PBF model where payments follow the patient for the services provided.

(ii) Future Changes

HSFR implementation will encapsulate a multi-year phased approach. Year 1 changes to primary unilateral knee replacement CCAC rehabilitation include a price and volume change. Performance will be monitored for Year 1 to mitigate against any issues that may arise. For subsequent years, data will continue to be collected and refined; the Ministry will monitor rates and make adjustments based on best practice evidence, as necessary. Evaluation and expansion of the model will occur as required.

(b) Data Sources

Multiple data sources, financial, statistical and clinical, were used to develop the funding for primary unilateral knee replacement rehabiliation. The data sources by calculation are:

For initial allocation

Carve-Out:

- 2010/11 DAD (Discharge Abstract Database),
- 2010/11 NACRS (National Ambulatory Care Reporting System),
- 2010/11 OHFS (Ontario Healthcare Financial and Statistical System), and
- Q2 2011/12 HCD (Home Care Database)

Price:

- 2010/11 DAD,
- 2010/11 NACRS,
- 2010/11 OHFS, and
- Q2 2011/12 HCD

Volume:

- 2008/09, 2009/10 and 2010/11 DAD,
- 2008/09, 2009/10 and 2010/11 NACRS, and
- Q2 2011/12 HCD

For volume update reconciliation

Carve-Out:

- 2011/12 DAD (Accountability Cut),
- 2011/12 NACRS (Accountability Cut),
- 2010/11 OHFS, and
- Q4 2011/12 HCD

Price:

- 2010/11 DAD,
- 2010/11 NACRS,
- 2010/11 OHFS, and
- Q2 2011/12 HCD

Volume:

- 2011/12 DAD (Accountability Cut),
- 2011/12 NACRS (Accountability Cut), and
- Q4 2011/12 HCD

(c) Carve-out

Primary unilateral knee replacement rehabilitation funding makes up a portion of the global funding of CCACs. In 2012/13, this primary unilateral knee rehabilitation portion of the global funding has been identified through a "carve-out".

The total funding envelope available for primary unilateral knee replacement rehabilitation in 2012/13 consists of the "carved-out" funding as well as the funding formerly associated with primary unilateral knee replacement rehabilitation under the WTS.

(d) Price

The price for primary unilateral knee replacement rehabilitation is set for total direct costs. The base price in 2012/13 is $554/ case, which is the 40th percentile price for 2010/11 adjusted for inflation.

Rationale: Price set at the 40th percentile will encourage system efficiency as best practices are incorporated into the price for HSFR years 2 and 3.

(e) Volume

Funding for primary unilateral knee rehabilitation is allocated on a 'price x volume' approach. Rehabilitation volumes will be allocated at the LHIN-level and the LHIN will be responsible for making allocation decisions (i.e., inpatient rehabilitation volumes and community rehabilitation volumes).

(i) LHIN Volume Management

The LHIN may re-allocate CCAC community rehabilitation QBP funding per the funding letter towards other HSPs of ambulatory rehabilitation, specifically Community Health Centres and hospital outpatient rehabilitation services. The LHIN must submit a proposal to the ministry for approval. In doing so the LHIN is committed to:

1. Ensuring that care is delivered to the patient in a care setting that best meets the needs of the patient,
2. Ensuring that volumes are distributed effectively across the LHIN, and
3. Ensuring that service utilization is being optimized across the LHIN.

Specific conditions related to LHIN volume management are set out in the Conditions of Funding schedules associated with the QBP funding letter.

(ii) Initial Volume Allocation Approach

1. The 2011/12 rehabilitation volumes were calculated using the two year provincial average growth and applying it to 2010/11 actual rehabilitation volumes
2. Decreased hospital inpatient rehabilitation knee volumes are added back to the 2011/12 rehabilitation volume
3. Volumes are allocated to the LHINs using a three year average share of volumes.

(iii) Final Volume Allocation Approach

1. Actual volumes for knees in 2011/12 were used.

(f) Corridors

A funding corridor of ±15% will be set to maintain system stability.

(g) Use of Funding

The funding allocated pursuant to the primary unilateral knee replacement QBP for rehabilitation services will be used solely for the purpose of providing rehabilitation services for primary unilateral knee replacement patients.

The LHIN will reallocate and recover appropriate volumes both in-year and at year-end.

Funding associated with community rehabilitation volumes not completed by fiscal year end will be recovered by the Ministry. Year-end recoveries will be calculated by taking the community rehabilitation volumes allocated and subtracting the community rehabilitation volumes completed as reported through the SRI.

As part of the funding commitment the Ministry will be expecting that the CCAC report the encrypted client-level data through SRI/Client Health and Related Information System (CHRIS) to their LHIN for the periods of April 1 to September 30 and October 1 to March 31. (Note: the performance data requested and/or reporting period may be amended at a later date).

Specific conditions related to the use of funding are set out in the Conditions of Funding document associated with the QBP funding letter

(h) Quality Targets

The Ministry has introduced a quality target rate of 90% for patients discharged to home for primary unilateral knee replacement surgeries. As such, most LHINs will see a greater number of patients seeking rehabilitation services from the CCAC. It is expected that the CCACs work with the LHINs to build the appropriate capacity to meet the needs of the communities with the LHINs.

(i) Cash Flow

Payments to the CCACs are based on LHIN direction via the APTS. Minister and Assistant Deputy Minister approval letters which provide the allocation to each LHIN provide authority for the payment as well as stating the terms and conditions of the funding.

Payments are processed through regularly scheduled bi-weekly EFT.

(j) Reallocation, Reconciliation and Recovery

Funding letters provide the authority to conduct reallocations, reconciliations and to recover unspent funds and/or funds not used for their intended purposes.

Key Principles:

- Volumes will be identified provincially and at the LHIN-level through the allocation at the start of the year
- A mid-year reallocation process will be provided for the opportunity for volumes to be shifted between LHINs
- Any funds not used for their specific intended purpose will be subject to recovery by the Ministry

Data Availability and Timelines:

LHINS and their HSPs will be required to submit performance data in the SRI for all services (surgery, inpatient rehabilitation, and community rehabilitation).

R**eallocation, Reconciliation and Recovery Processes:**

1) Intra-LHIN Reallocation Process:

    - LHINs have the authority to move volumes between their HSPs within QBP services. These reallocations can happen at any time throughout the year but must be communicated to the Ministry for tracking purposes. Ex: Move volumes of primary unilateral hip replacement inpatient rehabilitation at Hospital A to community rehabilitation volumes at the CCAC

2) Inter-LHIN Reallocation Process:

    - During the mid-year reallocation process, volumes will be redistributed across LHINs as necessary. If the LHINs identify QBP volumes that cannot be performed by year end within the LHIN, they will be redistributed to LHINs that identify the need for additional volumes

3) Community Rehabilitation Reconciliation Process:

    - The mid-year reallocation process will also be used to facilitate the process of moving rehabilitation volumes across LHIN boundaries when patients receive surgery in one LHIN but receive rehabilitation in another. This will ensure that LHINs are properly funded for volumes performed within their boundaries

    - The LHINs will be required to track the following information for this reconciliation process:

        1) The number of surgical cases their hospitals performed
        2) The number of inpatient rehabilitation their hospitals performed
        3) The number of community rehabilitation volumes performed within their LHIN for patient who received surgery within the LHIN
        4) The number of community rehabilitation volumes performed within their LHIN for patients who received surgery outside of their LHIN.

4) Year-End Recoveries:

The year-end recovery process is important for cash management purposes as it matches the CCAC's allocation with the CCAC's actual year-end activity. Year-end recoveries are performed using the actual volume reported in SRI through Year-End Supplementary reports, which will be confirmed by the LHINs. Calculating the variance between the actual volume and the funded activity results in a net recovery amount. Recovery amounts will be processed against HSPs directly.

Each HSP will have their funded primary unilateral knee replacement rehabilitation volumes reconciled against actual primary unilateral knee replacement rehabilitation volumes performed; any over- or underperformance will not be netted against any other QBPs.

Appendices

Appendix A: Definitions

Carve-out
An amount extracted from an HSP's global funding, based on an estimate of what was spent on a procedure or service from its global funding, using that HSP's own costs.

Corridor
Mitigates the impact of HSFR by creating a maximum percentage that an HSP's funding can rise or fall in a year. For example, a corridor of ± 2% will prevent an HSP from having funding increase or decrease more than that amount, regardless of its allocation under the policy model.

Direct Costs
Costs directly related to the provision of care to the patient. They include departmental total net costs in inpatient nursing (e.g., medical inpatient nursing, operating room, and intensive care unit), ambulatory care nursing (such as emergency, medical day/ night clinics), laboratory, diagnostic imaging, pharmacy, allied health, and patient food services.

Health Based Allocation Model (HBAM)
An evidence-based funding approach that uses population and clinical information to inform funding allocation. Additional information on HBAM may be found in Appendix B.

Indirect Cost
Are overhead costs relating to running an HSP. They mainly include departmental net costs in administration, finance, human resources, plant operations, etc.

Small Hospital
Those hospitals with fewer than 2,700 acute inpatient and day surgery weighted cases in any two of the prior three years.

Total Patient Focused Funding
Total operational funding provided to HSPs, including global, HBAM, and QBP funding.

Appendix B: Backgrounder: Health Based Allocation Model

HBAM is an evidence-based funding approach that uses population and clinical information to inform funding allocation. Population information includes basic demographic information such as age, gender and growth projections, as well as socio-economic status and rural geography. Clinical information includes measures of disease and status such as diagnostic and procedural information related to the different types of care provided to the population.

The model is made up of two main components:

1. ***The service component****: Estimates annual use of health services in each care type, taking into account each Ontario resident's clinical, social and demographic conditions.*
2. ***The unit cost component****: Determines unit costs in each care type for each health service provider and HSP characteristics that justifiably lead to higher unit costs.*

The model generates a "share of expected expenses" which is used to determine each LHIN's and ultimately each HSP's share of available funding.

The model currently covers selected modules/service areas in hospital and home care sectors:

Hospital sector:

- Acute inpatient and day surgery;
- Emergency;
- Complex continuing care;
- Inpatient rehabilitation; and
- Inpatient mental health.

Community sectors:

- Home Care (CCACs)

Future modules may include outpatient clinics, community mental health, community support services, other community services and LTCHs.

The model can also be used by LHINs as a management tool at the organizational level. Each LHIN's funding allocation is broken down by care type and HSP. LHINs can use the HBAM service component results to identify and plan health services across the LHIN, among the relevant HSPs. This enables LHINs to use the model as a funding allocation tool and helps them to make more informed decisions about how to distribute funding to their HSPs.

HBAM continues the evolution of Ontario's formula-based health funding strategies in support of the LHIN model

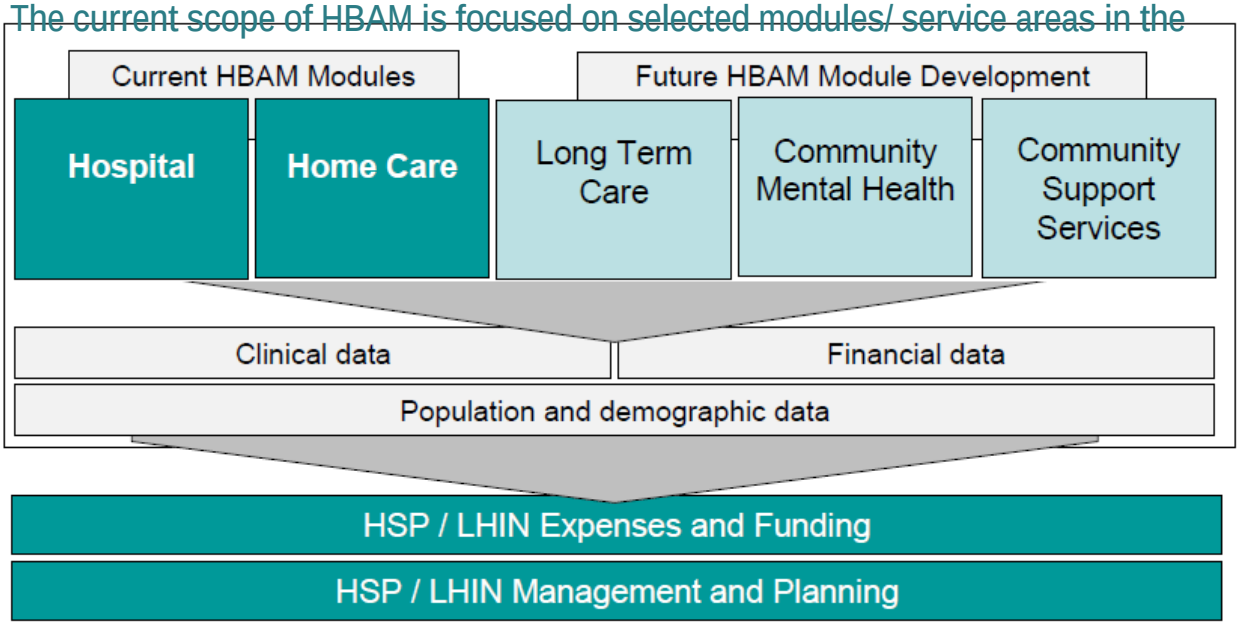
- Ontario has a 20 year history of incremental funding for hospitals through formulaic methodologies
- Formulaic methodologies have maintained consistent aims:
  - Account for population characteristics that affect requirements for health care;
  - Recognition of hospital characteristics that legitimately affect cost of providing service;
  - Recognition of variation in case mix that affects resources required to provide treatment; and
  - Provide relevant performance benchmarks.

Prior to developing HBAM, the Ministry together with stakeholders established the following guidling principles:

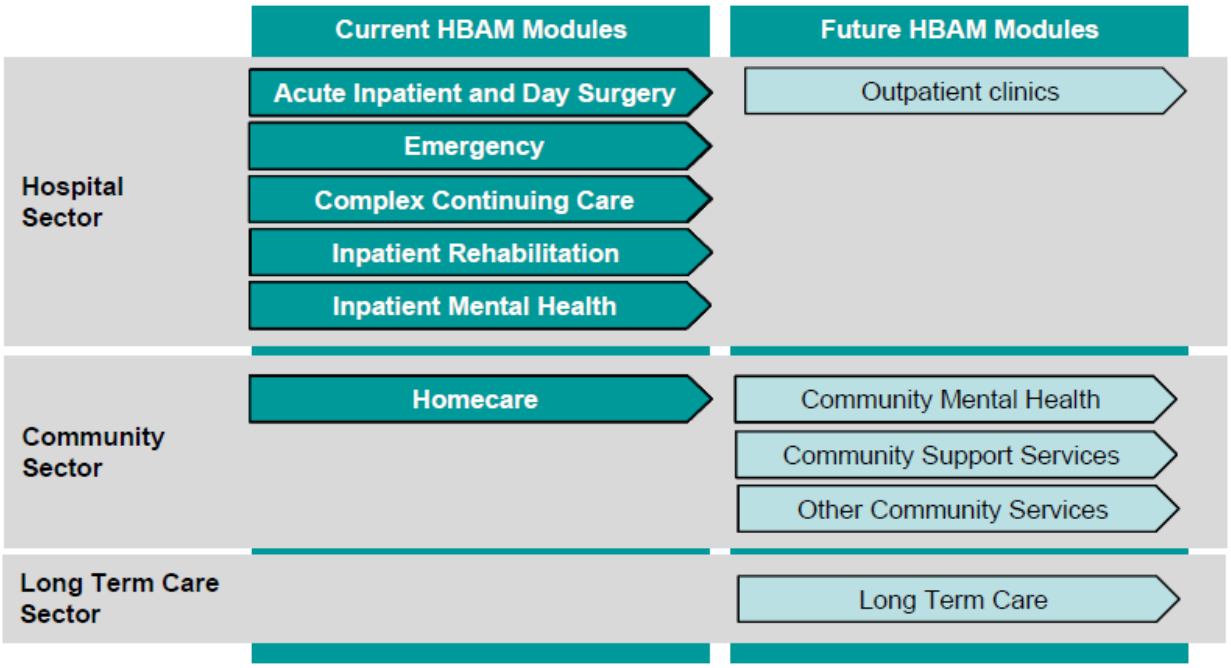
1. Provide a more evidence-based distribution of funding to LHINs within the government's budget limits
2. Facilitate health sector integration
3. Recognize provider characteristics that are commonly accepted to affect the cost of providing care
4. Maintain an individual's freedom to choose their HSPs
5. Be simple to understand and communicate
6. Ensure stability in funding from year to year

HBAM provides a more integrated funding and planning perspective through aggregation of multiple data sources across HSP sectors

The current scope of HBAM is focused on selected modules/ service areas in the



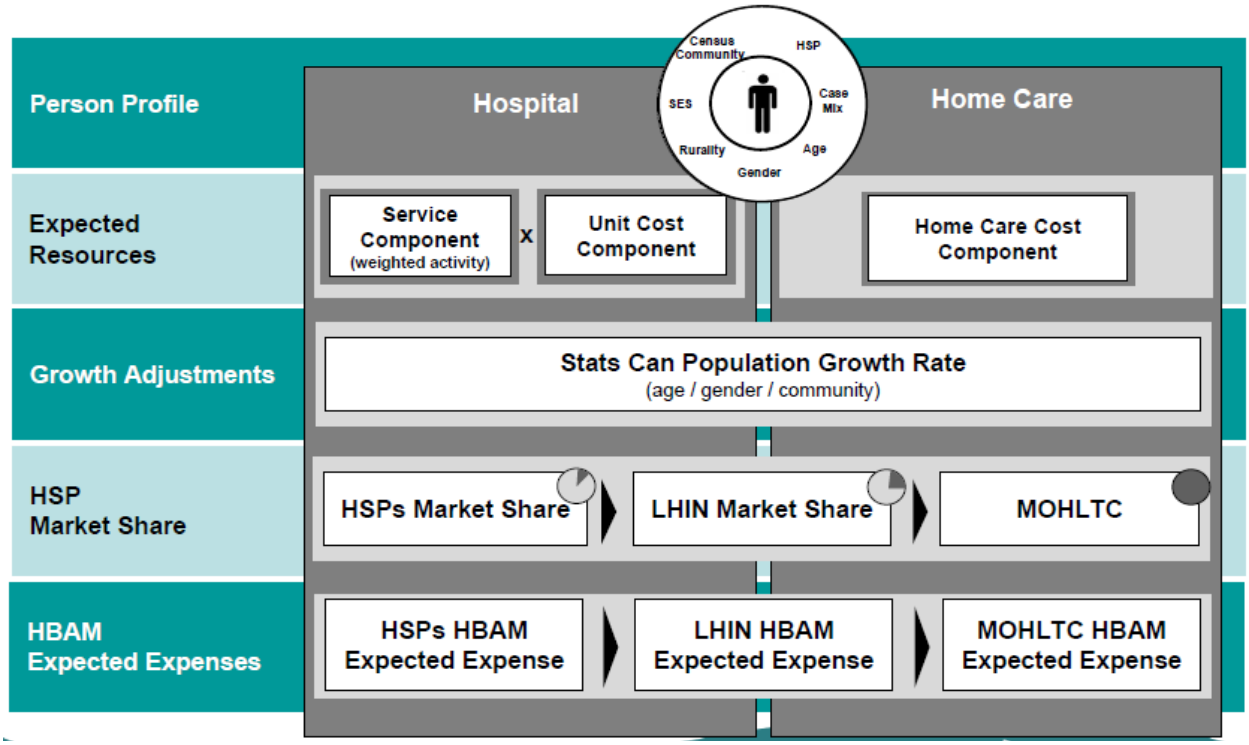
hospital and home care sectors



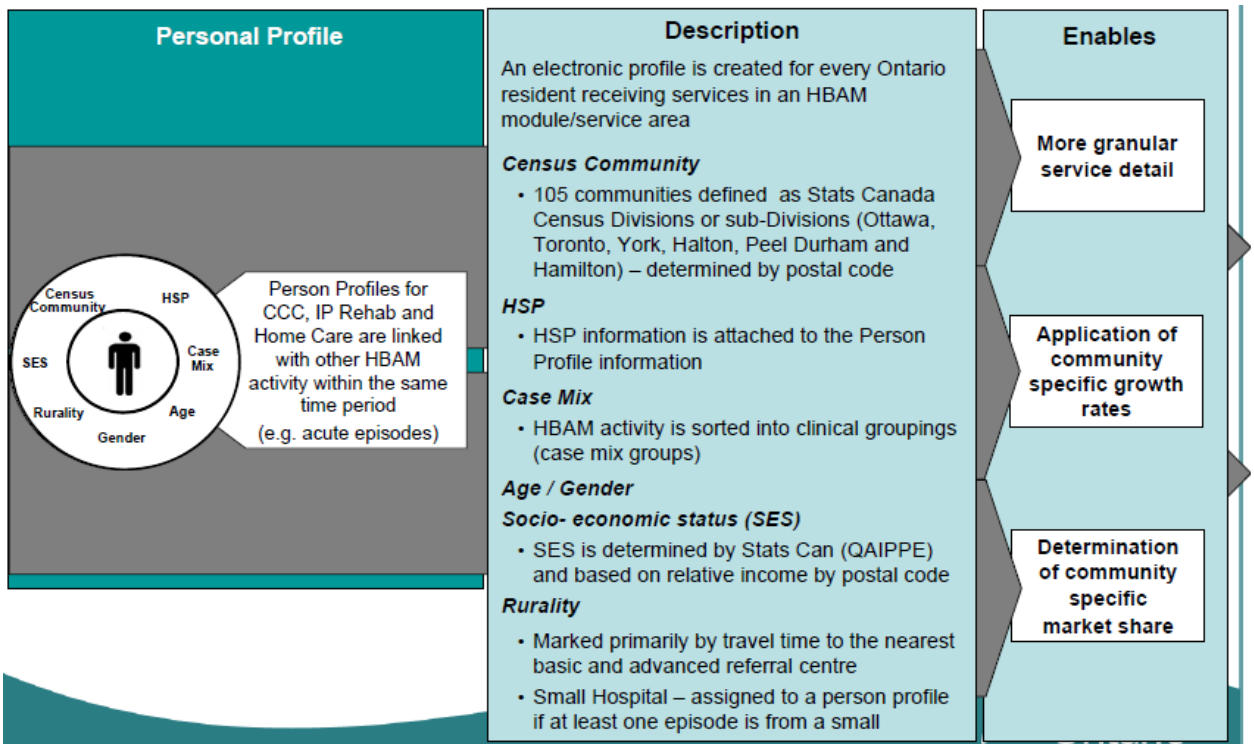
Development of a Person Profile within HBAM increased the sensitivity of the model to enable more specific forecasting, market share, and other types of analyses

- A Person Profile will be created for each Ontario resident that received care funded by OHIP at an Ontario hospital
- The Person Profile will include both demographic and clinical data providing a more fulsome understanding of the characteristics of individuals receiving services across Ontario, and identifies the specific HSPs from which services are provided
- Linking demographic data including the community of residence to clinical data allows for more specific growth and patient population projections
- These insights may be used to guide funding allocation, as well as an additional resource of data to inform strategic and service related planning and decision making

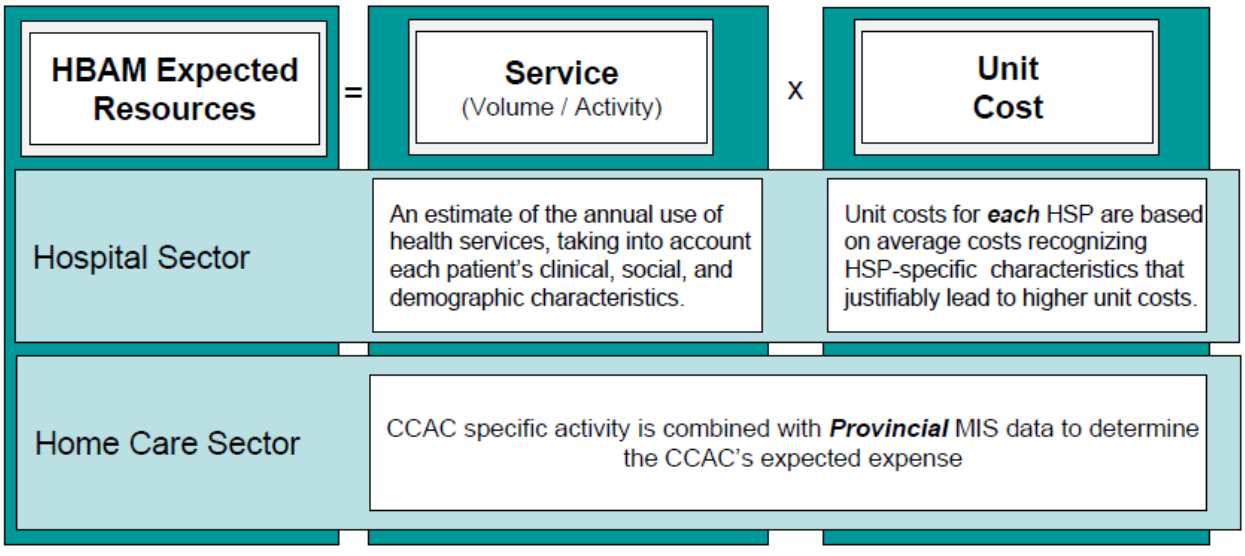
HBAM - Overview



HBAM Person Profile – Overview



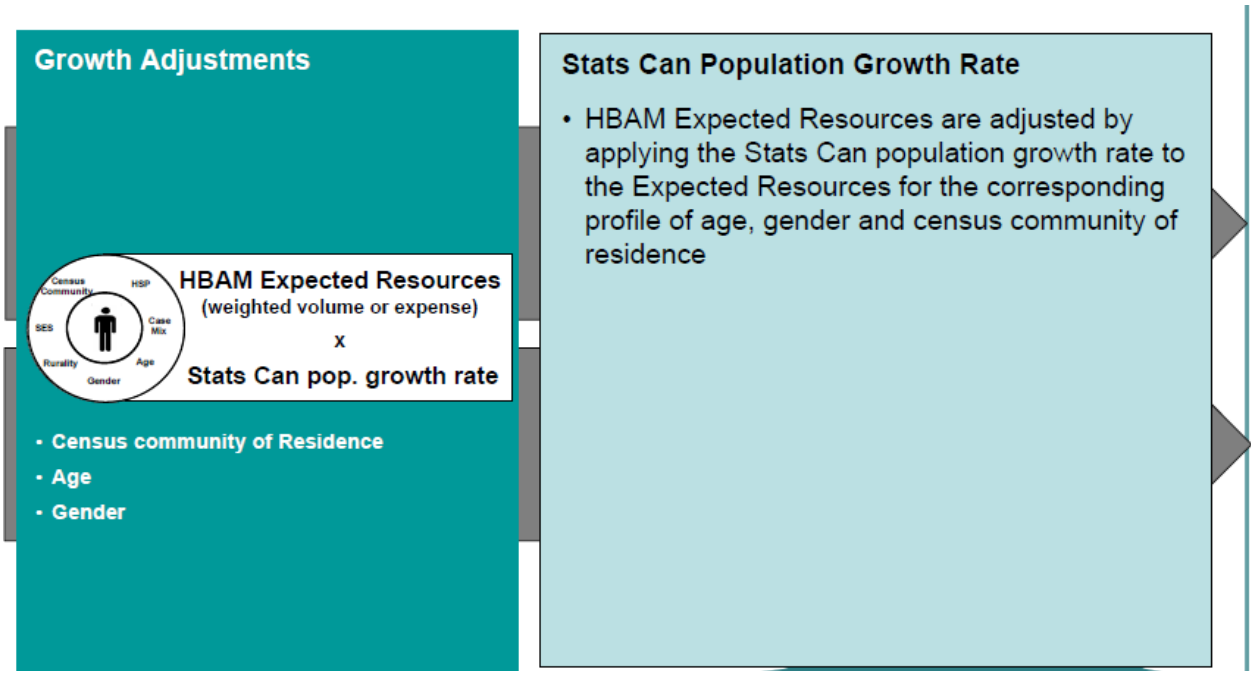
HBAM Expected Resources – Overview



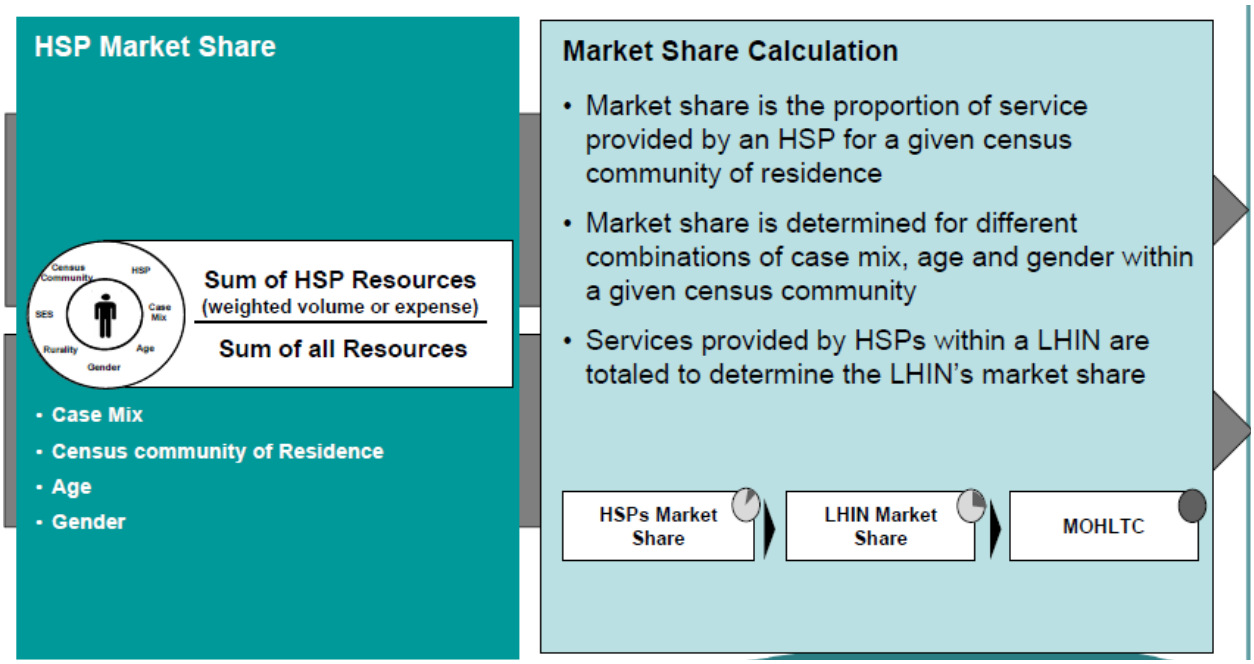
Hospital Unit Cost Modifiers

	Teaching	Rural Geography	Economies of Scale	Specialized Services	Hospital Type
Acute Inpatient and Day Surgery	✓	✓		✓	
Emergency	✓				
Complex Continuing Care	✓		✓	✓	
Inpatient Rehabilitation					✓
Inpatient Mental Health	✓				

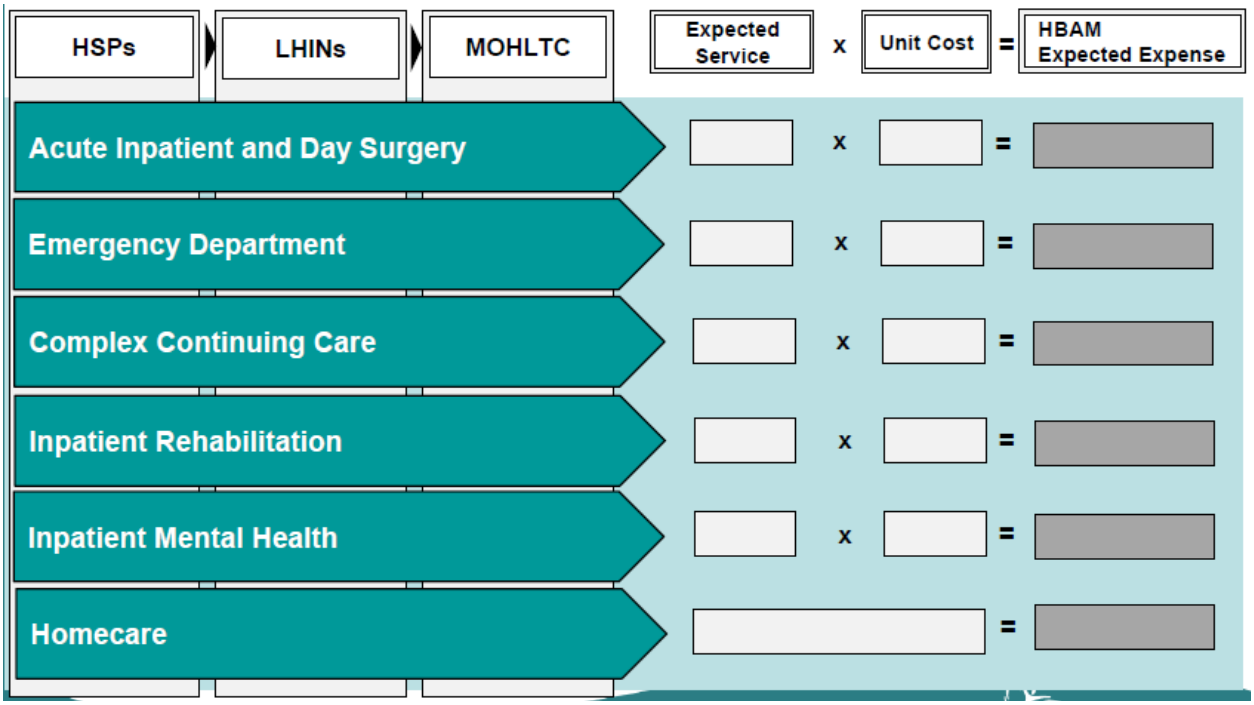
Growth Adjustments – Overview



Market Share – Overview

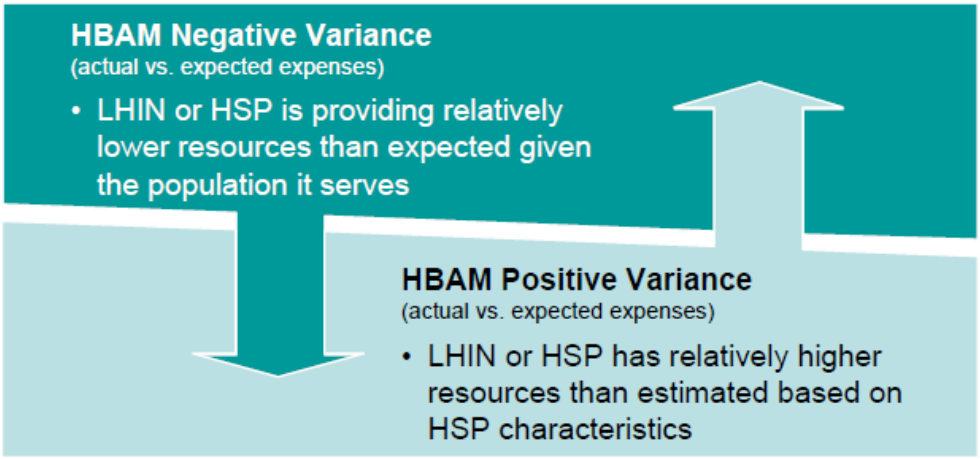


HBAM Expected Expense – Overview



HBAM may be used to examine positive and negative variances across Person Profile characteristics as well as at the HSP, community, and LHIN levels

For Example:



HBAM enables more detailed and granular analysis of various aspects related to the Person Profile, community, HSP, and LHIN characteristics

HBAM may be used to:

- Identify resource-intensive Person Profiles for targeted interventions (i.e., increased clinical/ community service levels)
- Estimate annual growth rates of Personal Profile (population) segments for different sectors, types of services, and disease prevalence rates for individual HSPs, LHINs, and at the provincial level
- Enable LHIN and HSP planning personnel to examine current or changes in market share by individual census community that may impact their service complement and capital planning

Appendix C: Contact Information

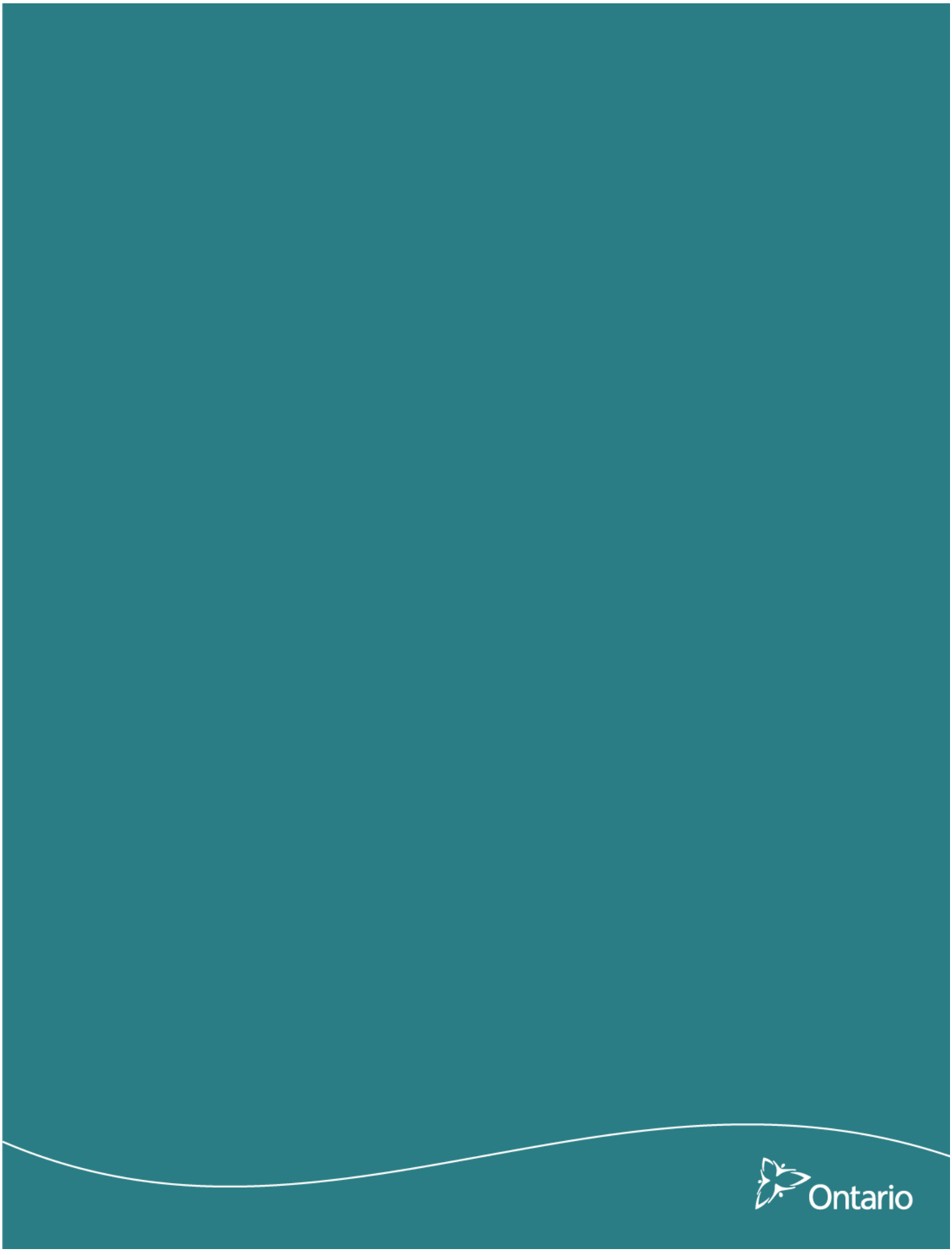
If you have questions regarding HSFR, or wish to receive additional information or resources, please utilize one of the following contacts:

Telephone: (416) 327-7625

E-Mail: HSF@Ontario.ca

Public Website: http://www.health.gov.on.ca/en/ms/ecfa/pro/initiatives/funding.aspx

Private Website: https://hsimi.on.ca/hdbportal/ . Ministry, LHIN, and HSP staff are required to obtain a user name and password prior to accessing this website. Instructions can be found on the website's homepage.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