Quality-Based Procedures Clinical Handbook for Systemic Treatment

Ministry of Health and Long-Term Care

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1.0 Purpose

This clinical handbook has been created to serve as a compendium of the evidence-based rationale and clinical consensus driving the development of the policy framework and implementation approach for Systemic Treatment.

This document has been prepared for informational purposes only. This document does not mandate health care providers to provide services in accordance with the recommendations included herein. The recommendations included in this document are not intended to take the place of the professional skill and judgment of health care providers.
2.0 Introduction

Historically, a large portion of health service providers’ funding has been grounded on a base annualized funding (global allocation), which is used to maintain day-to-day operations, such as: staff wages & benefits; overhead costs and service/maintenance contracts and new incremental funding, based on a funding formula, which takes into account demographics and acuity: growth funding targeted at fastest growing communities, hospital type (i.e. small/rural to cover service gaps, academic hospital sites to cover higher cost and acuity).

There needs to be a move to better integrate and align funding mechanisms across sectors to respond to volume and mix of services that meet population need through the pathway of care for patients. By focusing on an enhanced alignment between high quality patient care and funding, reductions in variation in practice across the province can be achieved. The results of such reduction in practice variation facilitate the adoption of best clinical evidence-informed practices, ensuring our patients receive the right care, at the right place and at the right time.

In response to these fiscal challenges, as of April 1, 2012, the Ministry of Health and Long-Term Care (ministry) has implemented Health System Funding Reform (HSFR). Over the fiscal years 2012/13 to 2014/15, HSFR will shift much of Ontario’s health care system funding for hospitals and Community Care Access Centres (CCACs) away from the current global funding allocation towards paying for activity and patient outcomes, to further support quality, efficiency and effectiveness in the health care system.

HSFR is predicated on the tenets of Ontario’s Action Plan for Health Care and is aligned with the four core principles of the Excellent Care for All Act (ECFAA):

- 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.

HSFR is comprised of three key components:

1. Organizational-Level funding, which will be allocated as base funding using the Health Based Allocation Model (HBAM);
2. Quality-Based Procedure (QBP) funding, which will be allocated for targeted clinical areas based on a “price x volume” approach premised on evidence-based practices and clinical and administrative data; and
2.1 What are we moving towards?

Prior to the introduction of HSFR, a significant proportion of hospital funding was allocated through a global funding approach, with specific funding for select provincial programs, wait times services and other targeted activities. A global funding approach may not account for complexity of patients, service levels and costs and may reduce incentives to adopt best practices that result in improved patient outcomes in a cost-effective manner.

Under HSFR, provider funding is based on: the types and quantities of patients providers treat, the services they deliver, the quality of care delivered and patient experience/ outcomes. Specifically, QBPs provide incentives to health care providers to become more efficient and effective in their patient management by accepting and adopting best practices that ensure Ontarians get the right care, at the right time and in the right place.

The variations in patient care evident in the global funding approach warrant the move towards a system where ‘money follows the patient” (Figure 1).

Internationally, similar models have been implemented since 1983. While Ontario is one of the last leading jurisdictions to move down this path, this puts the province in a unique position to learn from international best practices and pitfalls and create a funding model that is best suited for the province.

Figure 1: The Ontario government is committed to moving towards patient-centred, evidence-informed funding that reflects local population needs and incents delivery of high quality care.
2.2 How will we get there?

The ministry has adopted a multi-year implementation strategy to phase in the HSFR strategy and will make modest funding shifts beginning April 2012. A three-year outlook has been provided to the field to support planning for upcoming funding policy changes.

The ministry has released a set of tools and guiding documents to further support the field in adopting the funding model changes. For example, a Quality-Based Procedure (QBP) interim list has been published for stakeholder consultation and to promote transparency and sector readiness. The list is intended to encourage providers across the continuum to analyze their service provision and infrastructure in order to improve clinical processes and where necessary, build local capacity. However, as implementation evolves, the interim List will continue to undergo further refinements pending stakeholder feedback and advice from the QBP Clinical Expert Advisory Groups.

The successful transition from the current, ‘provider-centred’ funding model towards a ‘patient-centred model’ will be catalyzed by a number of key enablers and field supports. These enablers translate to actual principles that guide the development of the funding reform implementation strategy related to QBPs. These principles further translate into operational goals and tactical implementation, as presented in Figure 2.

Figure 2: Principles guiding the implementation of funding reform related to Quality-Based Procedures

Principles for developing QBP implementation strategy

- Cross-Sectoral Pathways
- Evidence-Based
- Balanced Evaluation
- Transparency
- Sector Engagement
- Knowledge Transfer

Operationalization of principles to tactical implementation (examples)

- Development of best practice patient clinical pathways through clinical expert advisors and evidence-based analyses
- Integrated Quality Based Procedures Scorecard
- Alignment with Quality Improvement Plans
- Publish practice standards and evidence underlying prices for QBPs
- Routine communication and consultation with the field
- Clinical Expert Advisory Groups
- Overall HSFR Governance structure in place that includes key stakeholders
- Technical and clinical engagement sessions
- Applied Learning Strategy/ IDEAS
- Tools and guidance documents
- HSFR Helpline; HSIMI website (repository of HSFR resources)
2.3 **What are Quality-Based Procedures?**

QBPs are clusters of patients with clinically related diagnoses or treatments that have been identified using an evidence-based framework as providing opportunity for process improvements, clinical re-design, improved patient outcomes, and enhanced patient experience and potential cost savings.

The evidence-based framework uses data from the Discharge Abstract Database (DAD) and National Ambulatory Care Reporting System (NACRS) adapted by the ministry for its HBAM repository. The HBAM Inpatient Grouper (HIG) groups inpatients based on the diagnosis or treatment responsible for the majority of their patient stay. Additional data was used from the Ontario Case Costing Initiative (OCCI), and Ontario Cost Distribution Methodology (OCDM). Evidence such as publications from Canada and other jurisdictions and World Health Organization reports were also used to assist with the patient clusters and the assessment of potential opportunities.

The evidence-based framework assessed patients using five perspectives, as presented in Figure 3. This evidence-based framework has identified QBPs that have the potential to improve quality of care, standardize care delivery across the province and show increased cost efficiency.
Practice Variation

The DAD has every Canadian patient discharge (except Quebec), coded and abstracted for over 50 years. This information is used to identify patient transition through the acute care sector, including discharge locations, expected lengths of stay and readmissions for each and every patient, based on their diagnosis and treatment, age, gender, co-morbidities and complexities and other condition specific data. A demonstrated large practice or outcome variance may represent a significant opportunity to improve patient outcomes by reducing this practice variation and focusing on evidence-informed practice. A large number of 'Beyond Expected Length of Stay' and a large standard deviation for length of stay and costs were flags to such variation. Ontario has detailed case costing data from many hospitals, as far back as 1991 for all patients discharged from some case costing hospitals, as well as daily utilization and cost data by department, by day and by admission.
Availability of Evidence

A significant amount of research has been completed both in Canada and across the world to develop and guide clinical practice. Working with the clinical experts, best practice guidelines and clinical pathways can be developed for these QBPs and appropriate evidence-informed indicators can be established to measure the quality of QBP care and help identify areas for improvement at the provider level and to monitor and evaluate the impact of QBP implementation.

Feasibility/ Infrastructure for Change

Clinical leaders play an integral role in this process. Their knowledge of the patients and the care provided or required represents an invaluable component of assessing where improvements can and should be made. Many groups of clinicians have already formed and provided evidence and the rationale for care pathways and evidence-informed practice.

Cost Impact

The selected QBP should have as a guide no less than 1,000 cases per year in Ontario and represent at least one per cent of the provincial direct cost budget. While cases that fall below these thresholds may in fact represent improvement opportunity, the resource requirements to implement a QBP may inhibit the effectiveness for such a small patient cluster, even if there are some cost efficiencies to be found. Clinicians may still work on implementing best practices for these patient sub-groups, especially if it aligns with the change in similar groups. However, at this time, there will be no funding implications. The introduction of evidence into agreed-upon practice for a set of patient clusters that demonstrate opportunity as identified by the framework can directly link quality with funding.

Impact of Transformation

The selected QBPs must align with the government’s transformational priorities including alignment with the tenets of *Ontario’s Action Plan for Health Care*. In addition, a natural progression and trajectory to assess a QBP’s impact on transformation would be to begin to look at other patient cohorts (e.g. paediatric patient populations), impact on the transition of care from acute-inpatient to community care setting, significant changes from historical funding models/ approaches, integrated care models etc. QBPs with a lesser cost impact but a large impact on the transformation agenda may still be a high priority for creation and implementation.
2.4 How will QBPs encourage innovation in health care delivery?

QBP strategy is driven by clinical evidence and best practice recommendations from the Clinical Expert Advisory Groups. The Clinical Expert Advisory Groups are comprised of cross-sectoral, multi-geographic and multi-disciplinary membership with representation from patients as well. The panel members leverage their clinical experience and knowledge to define the patient populations and recommend best practices.

Once recommended best practices are defined, these practices are used to understand required resource utilization for the QBPs and further assist in the development of evidence-informed prices. The development of evidence-informed pricing for the QBPs is intended to incent health care providers to adopt best practices in their care delivery models, maximize their efficiency and effectiveness, and engage in process improvements and/or clinical redesign to improve patient outcomes.

Best practice development for the QBPs is intended to promote standardization of care by reducing unexplained variation and ensure the patient gets the right care, at the right place and at the right time. Best practices standards will encourage health service providers to ensure the appropriate resources are focused on the most clinically and cost effective approaches.

QBPs create opportunities for health system change where evidence-informed prices can be used as a financial lever to incent providers to:

- Adopt best practice standards;
- Re-engineer their clinical processes to improve patient outcomes;
- Improve coding and costing practices; and
- Develop innovative care delivery models to enhance the experience of patients.

An integral part of the enhanced focus on quality patient care will be in the development of indicators to allow for the evaluation and monitoring of actual practice and support on-going quality improvement.
3.0 Description of Systemic Treatment

Systemic treatment is a form of cancer treatment which uses antineoplastic agents, which travel throughout the entire body to destroy cancer cells. These treatments can be administered by intravenous injections or infusions (referred to as parenteral treatment) or in pill form (referred to as oral treatment). There are several types of systemic treatment: chemotherapy, hormone therapy, immunotherapy, and supportive care drug therapy. Commonly, antineoplastic agents are administered in combinations consisting of multiple drugs in standardized treatment regimens. These regimens have been proven to be of benefit for specific cancers and stages of disease through clinical trials. Systemic treatment may be provided in combination with surgery or radiation when it is referred to as combined modality therapy. When administered post-operatively it is referred to as adjuvant treatment. It may also be given before surgery when it is referred to as neo-adjuvant therapy. In either situation, it is administered for the purpose of completely eliminating the cancer (curative intent). Systemic therapy is also commonly administered for advanced cancer where the purpose of the systemic therapy is to extend life, reduce the symptoms from the cancer and to improve quality of life. For most advanced cancers, this type of treatment is administered with palliative intent. Systemic therapy may also be given for protracted periods of time after the initial episode of care as maintenance therapy, in order to sustain remissions in those who have had a good response to the initial treatment. Currently there are several hundred standardized systemic treatment regimens which are used on the basis of evidence to treat specific types and stages of cancer.

3.1 Systemic Treatment Clinical Pathway

Systemic Treatment is delivered by a multi-disciplinary team of healthcare providers who ensure that the patient receives safe, high quality care. This team may include medical oncologists, hematologists, gynecology oncologists, pharmacists, nurses, dieticians, social workers, psychologists, and others.

An overview of the systemic treatment clinical pathway including the role of the relevant providers can be seen in Figure 4 below. The ambulatory systemic treatment QBP spans the time period seen within the red box below from consultation through treatment to follow-up care post-treatment.
3.2 The Need for a New Systemic Treatment Funding Model

Cancer Care Ontario (CCO) released a Provincial Plan in 2009, which was created through the collaborative efforts of regional partners, clinicians, administrators, as well as professional groups and associations. The Provincial Plan reviewed the current state of systemic treatment in the province, articulated the need to find new solutions to maximize efficient use of resources, and laid out actions required for program development. The Provincial Plan focused on goals and action items designed to improve patient safety in the delivery of systemic treatment throughout the province and to improve timely access to high-quality care as close to home as possible. The Plan encouraged collaboration in building strong and responsive Regional Systemic Treatment Programs in Ontario, in accordance with CCO’s Organizational Standards and as of March 2014, systemic treatment is delivered at 77 hospitals providing 4 levels of service across the province. It also provided recommendations for target setting and measurement of the cancer system’s performance. A key recommendation of the Provincial Plan was to develop a coordinated approach to the funding of systemic treatment that took into account the resource intensity associated with delivery of systemic treatment.

The previous approach to the funding of systemic treatment was based on lifetime funding for patients and was not always aligned with patient needs. This misalignment with patient needs was becoming increasingly apparent as systemic treatment became more complex. Figure 5 below, shows an example of three different patient scenarios. Despite the progressively greater complexity and cost of treatment when patients
present in higher level scenarios, under the current lifetime funding model, a facility would receive the same amount of funding for all three patient scenarios.

Figure 5: Patient Scenarios

In addition, there are a number of different funding envelopes for ambulatory systemic treatment services in Ontario which are not well aligned. The various funding envelopes are outlined in Figure 6.

Figure 6: Funding Envelopes

Other challenges to the lifetime funding model include the fact that funding is not explicitly aligned with evidence-informed practice, variations in practice exist, and funding is not impacted by performance, outcomes, or quality.
Nonetheless, there are a number of components of the current provincial systemic therapy system that support the development of a new systemic treatment funding model:

1) A systemic treatment organizational model has been implemented and is maturing (RSTP Provincial Plan)
2) A culture of collaborative performance improvement has been established across the system
3) There is an engine for best practice definition in place (Program in Evidence-Based Care, PEBC)
4) Measurement and reporting of performance at the regional level is well accepted (Cancer System Quality Index, CSQI).

Within this context, and in alignment with the Provincial Plan and the Ministry of Health and Long-Term Care’s (MOHLTC) direction for Health System Funding Reform (HSFR), CCO has implemented a new Patient-Based Funding (PBF) model for systemic treatment on April 1, 2014.

3.3 Evidence-Based Rationale for Systemic Treatment as a QBP

Systemic treatment has been identified as a QBP using the evidence-based selection framework as presented in Figure 7. Systemic treatment is in strong alignment with the overall requirements for QBPs: there is high variability in costs, strong feasibility and infrastructure for change, and significant evidence of a need for change, and practice variation which can be reduced, where appropriate, through the new funding model.
3.3 Systemic Treatment Funding Model Vision and Goals

The development of the systemic treatment funding model is driven by the following vision:

*Develop a new funding model that will drive consistent, equitable and high-quality care for patients being treated with systemic treatment across Ontario.*

The vision, goals and objectives are outlined in Figure 8.

Figure 8: Vision & Goals
The systemic treatment funding model is based on an activity-based bundled payment approach in order to:

1) Ensure funding follows the patient
2) Reduce inequities in funding
3) Tie funding to evidence-informed practice

This funding model also recognizes complexity of care, incident and prevalent cases, and ensures appropriate funding begins at consultation and continues throughout the course of treatment (both parenteral and oral chemotherapy) and follow-up.

For the 2014/15 fiscal year, there are 5 bundles of funding;

1) Consult and re-consult
2) Adjuvant, neo-adjuvant, or curative therapy
3) Palliative therapy
4) Active patients not on treatment
5) Un-modeled in year 1

The model and bundles are described in more detail in section 4.

3.4 Scope Clarifications

The systemic treatment funding model is applicable to all hospitals that provide systemic treatment ambulatory services to patients 18 years of age and older who receive a consultation with a medical oncologist, gynecology oncologist, or hematologist for the purposes of considering a treatment plan for systemic treatment, regardless of whether or not the patient proceeds to treatment.

The following areas or services are out of scope, for now:

1) Laboratory & diagnostic imaging
2) Inpatient Systemic Treatment
3) Home Care
4) Pediatrics
5) Physician Compensation

Additionally, the implementation of the new Systemic Treatment Funding Model (STFM) does not result in any changes to the Provincial Drug Reimbursement Program (PDRP) including the New Drug Funding Program (NDFP).
4.0 Best practices1 guiding the implementation of the Systemic Treatment QBP

The systemic treatment funding model has been developed using a collaborative multi-stakeholder approach, outlined in Figure 9. The governing Systemic Treatment Advisory Committee consists of clinical and administrative expertise from all regions of the province. The Advisory Committee is supported by a number of subgroups, established to develop recommendations for specific complex issues such as clinical trials and level 4 facilities. The model is also supported and developed through consultation with a number of advisory groups, including the provincial Disease Site Groups. Data inputs into model development include Activity Level Reporting (ALR) data, claims data, provincial guideline documents, and disease pathway maps.

Figure 9: Multi-stakeholder Collaborative Approach to Model Development

4.1 Developing the Bundles

As seen in the figure 10 below, the systemic treatment funding model results in facilities being consistently and equitably reimbursed based on a bundled services approach. Each bundle is explained in detail in the following sections.

1 Best practice refers to a combination of best available evidence and clinical consensus as recommended by the Clinical Expert Advisory Groups
4.1.1 Consult/Re-Consult Bundle

The consultation funding bundle starts at the time of consultation for systemic treatment with a medical oncologist, gynecological oncologist or hematologist. Additionally, a similar re-consult funding bundle will be provided when a patient starts on a new chemotherapy regimen and is intended to support the needs of a patient during this transition in care.

The Consult and Re-consult bundle includes:

- 2 patient visits - 1 visit for the initial consultation and a second visit around a decision to treat/not to treat
- Patient education
- Pre-medication counseling
- Individual or group education session on chemotherapy
- Psychosocial Supportive Care
- Co-ordination of drug access
- Medication Reconciliation
- Support for patient decision making

The definition of evidence-informed practice for the consultation bundle was determined by the Advisory Committee, supported by hospital surveys and consultation with nursing, pharmacy and psychosocial Resource Intensity Working Groups (RIW groups).
RIW groups consist of nursing, pharmacy and psychosocial (PSO) experts that identified the activities and time required to deliver best practice care to a standard patient. The time was adjusted for non-patient facing time and benefit hours using historical benchmarking. A rate for the bundle was then determined based on the time required and the MOHLTC HIT tool and UPP average hourly rates.

A summary of nursing and pharmacy activities and time is included below in Figure 11. Facilities are encouraged to ensure that the best practice activities are performed for all patients.

**Figure 11: Nursing & Pharmacy Activities and Time – Consult/Re-consult**

Nursing Activities (time= 75 minutes)
- 2 Clinic Visits + the following activities which may happen during or before/after the visits:
  - Patient education, including pre-medication counseling & individual and group education session)
  - Best Practice Medication History & Medication Reconciliation (may be pharmacy function)
  - Conversations with patients around drug access and costs (may be pharmacy function)

Pharmacy Activities (time= 60 min)
- Patient education, including:
  - Pre-medication counseling
  - Best Practice Medication History & Medication Reconciliation (may be nursing function)
  - Conversations with patients around drug access and costs (may be nursing function)
  - Drug reimbursement process management

A summary of Psychosocial Oncology (PSO) activities have also been incorporated in the consult and re-consult bundle. The PSO disciplines included are: nutrition, social work, speech language pathology, physiotherapy, occupational therapy and psychology. Detailed information on best practice was documented for each PSO discipline. A summary of the overall types/categories of activities is included in Figure 12. PSO has been built into the consult & re-consult phase for all patients and will be explored for inclusion in other bundles in future phases of work.

**Figure 12: Psychosocial Oncology Activities – Consult/Re-consult**

- Assessments
- Care plan development
- Referrals
- Symptom management planning
  - Examples include: pain, weight loss, fatigue, cognitive, physical & sexual function, depression & anxiety
- Financial planning
- Crisis / coping planning & decision making
- Non-patient facing time care: documentation, communicating with other professionals
The consultation bundle does not include activities related to diagnosis and staging. The reason for this is that diagnosis and staging commonly requires patients to have concurrent multidisciplinary assessments and is, therefore, not specific to systemic treatment alone. It also, in large part, involves laboratory and imaging activities which are currently out of scope for the QBP. However, diagnosis and staging has been identified as an opportunity for future work.

**4.1.2 Adjuvant, Neo-Adjuvant, Curative Therapy**

The adjuvant, neo-adjuvant, curative treatment bundle has been defined and will be funded as a regimen-based full course of treatment, as treatment in this setting is typically clinically well-defined and time-limited. It is understood that some patients may receive less treatment and some may receive more treatment, but the funding will be based on the evidence-informed course of treatment, specific to the regimen.

The determination of the evidence-informed practice for each of the treatment bundles was determined through consultation with the provincial Disease Site Group (DSG) leads as outlined in Figure 13. The provincial DSGs are groups of cancer experts whose practice is focused on a particular cancer type and who author clinical practice guidelines under the direction of the Program in Evidence Based Care (PEBC).

Figure 13: Determining Evidence-informed Practice

![Figure 13: Determining Evidence-informed Practice](image)

The lists of evidence-informed regimens are not included in this clinical handbook. However, a [systemic treatment funding model webpage](#) has been developed and includes the disease specific lists of evidence-informed regimens.

Every evidence-informed regimen for adjuvant, neo-adjuvant, and curative intent was priced individually based on the treatment protocol as defined by the DSG experts:

- Number of cycles, chemotherapy suite visits, clinic visits
- Associated nursing and pharmacy time
- Non-NDFP drugs, supportive drugs and supplies
- Follow-up care required post adjuvant, neo-adjuvant, curative treatment

Nursing and pharmacy resource intensity weight (RIW) working groups determined the time and activities associated with every chemotherapy regimen. Additional details on the nursing and pharmacy regimen RIWs are presented in Figure 14. A price for nursing and pharmacy resource time was determined based on the time required and the MOHLTC HIT tool and UPP average hourly rates.

Figure 14: Nursing & Pharmacy Activities – Regimens

The cost for non-NDFP drugs was determined using an average rate per/unit for each drug, and average body surface area of weight in kilograms. Figure 15 outlines the inputs for costing each non-NDFP drug in a treatment regimen. Please note, further information about drug pricing within the model will be released within a briefing note from CCO in the spring of 2014.

Figure 15: Non-NDFP Drug Costing

<table>
<thead>
<tr>
<th>Regimen Code</th>
<th>Regimen Details</th>
<th>4 cycles</th>
<th>Drug 1 - mg</th>
<th>Drug 1 - days delt</th>
<th>Drug 1 - $/mg</th>
<th>Drug 2 - mg</th>
<th>Drug 2 - days delt</th>
<th>Drug 2 - $/mg</th>
<th>BSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISPETOP(3D)</td>
<td>Cisplatin 25 mg/m² IV days 1-3; Etoposide 100 mg/m² IV days 1-3; Q21 days</td>
<td>6</td>
<td>25</td>
<td>3</td>
<td>0.2341</td>
<td>100</td>
<td>3</td>
<td>0.2891</td>
<td>1.79066</td>
</tr>
</tbody>
</table>

Costs associated for average supply and clinic costs were incorporated into the price of each regimen.

Post treatment follow-up visits were also built into the price of each adjuvant/curative/neo-adjuvant regimen. The number of post treatment follow-up visits was determined by reviewing various guidelines and through consultation with the DSG experts. The number of follow-up visits was adjusted for factors such as devolving the care of patients to primary care providers, shared care with other physician groups and survival and relapse rates. The well follow-up visits include the associated nursing, manager and clerical time as well as clinic costs: supplies, equipment and sundry costs.
CCO will continue to monitor the number of follow-up visits post adjuvant/curative/neo-
adjuvant treatment and revise/refine the strategy if required.

In order to reduce complexity in the model, evidence informed regimens of a similar
price were banded together. A final 4 band (price point) model, with a small number of
expensive un-banded regimens, results in a similar reimbursement profile at both the
system/provincial and facility level when compared to reimbursement of each regimen
at its individual price.

4.1.3 Palliative Therapy

The approach used to identify evidence-informed practice, price and band for the
adjuvant, neo-adjuvant, and curative treatments was also used for palliative treatments.
However, post-treatment follow-up has not been built into the price of palliative
regimens. A separate funding rate for palliative supportive care, off treatment has been
determined.

The palliative treatment bundle will be funded on a monthly, time-based approach as
treatment in this setting is much more variable due to dependency on factors such as
patient response and toxicity. The bundle may also include multiple lines of parenteral
non-IV (oral, intramuscular and sub-cutaneous) therapy and periods of time when
patients receive complex supportive care during breaks from active treatment or at the
end of life.

A final 4 band (price point) model, with a small number of expensive un-banded
regimens for a month of care has been established. The lowest band is defined by a
month of supportive care, off active treatment and non-IV treatment while the other
three bands are triggered by patients on IV treatment regimens of varying complexity.

It is important to note that while some palliative regimens only require one treatment
and ambulatory clinic visit in a month, the price of every palliative regimen has been
adjusted based on historical ALR data to include a minimum of two ambulatory clinic
visits a month in order to meet the additional supportive care needs of palliative
patients. The price for a month of palliative supportive care, off treatment also includes
2 ambulatory clinic visits per month.

Funding for support of patients receiving non-IV regimens will be provided through the
systemic treatment funding model, including funding for a re-consult when a patient
starts on a new regimen. As most non-IV regimens are delivered with palliative intent,
all non-IV therapies will be funded at the same rate as palliative supportive care, off
active treatment in the 2014/15 fiscal year. As non-IV data reporting improves over the
coming years, the approach of funding all non-IV regimens at this rate may be revised.

It will be important to capture and report non-IV chemotherapy data. Failing to report
non-IV regimens would result in a facility receiving less funding because:

- The re-consult bundle would not be triggered with the start of a new treatment
- A patient who is not identified as receiving an IV treatment or non-IV treatment
  will appear as “active patient, not on treatment” and will be funded at a lower rate
• Non-IV regimens may, in future, be funded in various bands (currently all non-IV regimens are funded at the rate of palliative supportive care, off treatment)

Table 1 outlines the number of regimens identified as evidence-informed by disease site and treatment intent. Please note that the lists of evidence-informed regimens will be updated on a regular basis to ensure alignment with optimal clinical practice.

Table 1: Number of Evidence-Informed Regimens by Disease Site and Treatment Intent

<table>
<thead>
<tr>
<th>Disease Site</th>
<th>Adjuvant/Curative</th>
<th>Adjuvant/Curative &amp; Palliative</th>
<th>Palliative</th>
<th>Disease Site TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>17</td>
<td>6</td>
<td>46</td>
<td>69</td>
</tr>
<tr>
<td>CNS</td>
<td>-</td>
<td>1</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>9</td>
<td>19</td>
<td>53</td>
<td>81</td>
</tr>
<tr>
<td>Genitourinary</td>
<td>10</td>
<td>17</td>
<td>36</td>
<td>63</td>
</tr>
<tr>
<td>Gynecological</td>
<td>9</td>
<td>13</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>Head &amp; Neck</td>
<td>6</td>
<td>5</td>
<td>20</td>
<td>31</td>
</tr>
<tr>
<td>Hematology</td>
<td>29</td>
<td>9</td>
<td>71</td>
<td>109</td>
</tr>
<tr>
<td>Lung</td>
<td>10</td>
<td>10</td>
<td>25</td>
<td>45</td>
</tr>
<tr>
<td>Sarcoma</td>
<td>5</td>
<td>12</td>
<td>12</td>
<td>29</td>
</tr>
<tr>
<td>Skin</td>
<td>1</td>
<td>1</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>Primary Unknown</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

4.1.4 Active Patients Not on Treatment

The systemic treatment funding model will provide funding to support the care of patients being followed at a treatment facility but who are not on active treatment. This group of patients could include the following:

• Patients who have not yet started treatment
• Patients who are either well or unwell who are on “watchful waiting” for treatment
• Patients receiving oral treatment which has not been reported to CCO’s Activity Level Reporting (ALR)

The price for this bundle incorporates nursing time and other clinical costs, and is based on the average patient activities using a monthly time-based approach. Funding for this bundle is provided at a lower rate than the monthly palliative supportive care off active treatment price point and incorporates 1 clinic visit per month and associated nursing activities.
4.1.5 Clinical Trials Funding Approach

One of the systemic funding model guiding principles is to “promote access to clinical trials where appropriate”. A Clinical Trials Sub-group, consisting of clinical trials experts from across the province, developed a definition of clinical trials for the purposes of the funding model, key principles for funding clinical trials and the approach for funding clinical trials, outlined in Figure 16.

Figure 16: Systemic Treatment Funding Model & Clinical Trials

<table>
<thead>
<tr>
<th>Systemic Treatment Funding Model Clinical Trials Definition:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A clinical trial is an intervention to evaluate a systemic anti-cancer drug or biologic which has undergone institutional (peer) review and has obtained ethics approval at the institutional or provincial level.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Principle:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Systemic Treatment Funding Model will fund the standard of care for all clinical trials, but will not fund the cost of the investigational clinical trial drug(s) or other activities (investigations, additional work for nurses, pharmacists, supplies costs) that are incremental to the standard of care.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trial Phase</th>
<th>Funding Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 3 or Randomized Phase 2</td>
<td>For trials with an evidence-informed standard of care arm, funding for all patients entered onto the trial will be provided at the level (band) of the standard of care.</td>
</tr>
<tr>
<td>Phase 1 or 2</td>
<td>For trials with a single arm study that adds or modifies a recognized evidence-informed standard of care, funding for all patients entered onto the trial will be provided at the level (band) of the standard of care. Funding for all patients entered onto a trial with there is no existing standard of care option, will be provided at the level (band) of supportive care, off active treatment.</td>
</tr>
</tbody>
</table>

4.1.6 Future Refinements

There are several systemic therapy program components which will remain un-modeled in 2014/15. This will necessitate funding hospitals at a specific un-modeled bundle rate as part of the funding approach for 2014/15. Modeling the “un-modeled” elements (procedures and administrative infrastructure) will be part of the 2014/15 developing workplan. That includes the identification of best practice, pricing based on best practice and the data collection approach.

Components of the 2014/15 un-modeled bundle include:

**Services and procedures**
- Paracentesis & Thoracentesis
- Lumbar Puncture
• Bone Marrow
• Transfusion of blood products
• Therapeutic phlebotomy
• Infusion for hydration

Further work is required to determine data collection strategies and evidence informed pricing.

**Infrastructure**

Some infrastructure costs have been incorporated into the bundled payment funding model; however, further validation will be done to determine funding for other infrastructure resources in fiscal year 2014/15. For year one, manager, clerical, and administration workload and funding has been built into the consultation and treatment bundles (based on MOS), and drug access work has been incorporated into nursing and pharmacy time in the consult/re-consult bundle.

However, other infrastructure elements, which may have been funded through the previous life-time funding model, may not have been considered and included in the current funding model.

Therefore, the systemic treatment funding model will be further developed, expanded and refined over the coming years thereby eliminating the un-modeled bundle. The planned refinements and enhancements are outlined in figure 17. It should be noted that model enhancements are the focus of 2014/15 development workplan. Continuous monitoring and evaluation of the model will identify required refinements and future development and expansion.
Figure 17: Systemic Funding Model – Future Refinements, Development & Expansion

Note: focus of the 2014/15 year will be on model enhancement, evaluation & stabilization

Systemic Treatment Funding Model 2014/15 Implementation

Enhance model

Refine bundles
- Procedures & Services
- Infrastructure
- Data collection strategy (ALR & eClaims)
- Enable more consistent practice
- Add additional quality measures
- Enhance governance

Diagnostic and Lab
- Palliative Care
- Home Care
- Inpatients
- ER?

Expand scope

Pay for Performance
- Align MD Funding

Align other funding
### 4.1.7 Bundle Summary

<table>
<thead>
<tr>
<th>Bundle</th>
<th>Included in Bundle</th>
<th>Bundle Payment Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consult/Re-Consult</td>
<td>• 2 visits; initial consultation and decision to treat</td>
<td>1 funding rate</td>
</tr>
<tr>
<td></td>
<td>• Patient education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pre-medication counseling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Individual and group education session on systemic therapy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Psychosocial Supportive Care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Co-ordination of drug access</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Medication Reconciliation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Support for patient decision making</td>
<td></td>
</tr>
<tr>
<td>Adjuvant/ Curative Therapy</td>
<td>• Number of cycles</td>
<td>4 funding rates + some additional regimens that are unbanded, due to high price</td>
</tr>
<tr>
<td></td>
<td>• Number of Chemotherapy Suite Visits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Number of Ambulatory Clinic Visits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Nursing Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pharmacy Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Non-PDRP funded drugs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supportive Drugs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supplies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Follow-up visits during and post treatment</td>
<td></td>
</tr>
<tr>
<td>Palliative Therapy</td>
<td>• # Chemotherapy Suite Visits (IV treatment only)</td>
<td>3 funding rates for IV</td>
</tr>
<tr>
<td></td>
<td>• # Ambulatory Clinic Visits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Nursing Time</td>
<td>1 price point for non-IV and palliative/ supportive care, off treatment (based on 2 visits per month)</td>
</tr>
<tr>
<td></td>
<td>• Pharmacy Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Non-PDRP funded drugs (IV treatment only)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supportive Drugs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supplies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Follow-up visits during treatment</td>
<td></td>
</tr>
<tr>
<td>Active Patients not on Treatment</td>
<td>• 1 Ambulatory Clinic Visit</td>
<td>1 funding rate</td>
</tr>
<tr>
<td></td>
<td>• Nursing Time</td>
<td>Monthly funding</td>
</tr>
<tr>
<td></td>
<td>• Pharmacy Time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supplies</td>
<td></td>
</tr>
<tr>
<td>Un-modeled in Year 1</td>
<td>• Procedures &amp; Services (long term approach: price x volume)</td>
<td>1 hospital specific rate for 2014/15</td>
</tr>
<tr>
<td></td>
<td>o Paracentesis &amp; Thoracentesis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Lumbar Puncture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Bone Marrow</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Transfusion of blood products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Therapeutic phlebotomy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Infusion for hydration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Infrastructure (long-term approach: separate bundle)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Resources are defined as systemic treatment program components (direct costs)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Other elements which may have been included in C1S funding</td>
<td></td>
</tr>
</tbody>
</table>
5.0 Implementation of best practices

Practitioners should ensure that all regimens prescribed are evidence-informed as defined by the systemic treatment funding model. Additionally, all care delivery and administrative processes should align with best practices:

- Regimen protocols
  - The number of cycles, chemotherapy suite visits, ambulatory clinic visits
- Nursing and Pharmacy RIW defined best practice activities & time

5.1 Practitioner Tools

CCO has developed several tools that will aid in the implementation of best practices.

1) Knowledge Transfer & Exchange (KTE) Packages: CCO has been providing facilities with ALR data KTE packages. The purpose of these packages is to provide a detailed overview of the systemic treatment funding model; facility volumes for each of the developed bundles (consult bundle, adjuvant/curative/palliative course of treatment bundle, palliative time-based bundle etc.). A detailed breakdown of the Banding Methodology has also been provided. Please note that to date the purpose of the KTE packages was not to provide funding impact but to flag where practices may not be in alignment with evidence-informed practice, including information on consults for benign cases, and treatment regimens which are not evidence-informed for a specific disease site or treatment intent. Moving forward, CCO will also provide patient level data to facilities to support both practice change and improvements in data quality.

2) For more information on evidence informed practice and to obtain copies of evidence informed regimen lists, please visit https://www.cancercare.on.ca/STFM

- Please note that these lists will be updated quarterly, to ensure alignment with current evidence-informed clinical practice.
- There will be opportunities for practitioners to provide ongoing feedback using a Regimen Request form that can be found on the website.

3) Operational Reports will be provided to facilities monthly which will identify episodes that will not be funded and these reports will support ongoing refinements in data collection and clinical practice.

4) Additional information on evidence informed practice: CCO will provide RIW and other pricing details used to price the evidence informed practices, so that facilities will have the opportunity to compare their practices to the evidence informed practice.
6.0 What does it mean for multi-disciplinary teams?

6.1 Importance of Accurate Data Collection & Reporting

The new funding model is supported by a small sub-set of the data currently submitted to CCO’s databook - Activity Level Reporting (ALR). Consult funding and palliative supportive care funding is triggered by evidence of ambulatory clinic visits. Re-consult funding and all treatment funding is supported by the following 3 data elements which need to be accurately reported and submitted to CCO’s databook via CPOE or Hospital System:

- Regimen
- Disease Site
- Treatment Intent
- Plus indication of a treatment/clinic visit

CCO asks that all practitioners, administrators, IT and decision support pay particular attention to the data quality of the aforementioned data elements to ensure appropriate funding for the facility. When reviewing regimens reported to ALR to determine evidence-informed practice, we noted scenarios such as the following:

### Scenario 1

<table>
<thead>
<tr>
<th>Regimen</th>
<th>Disease Site</th>
<th>Treatment Intent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABVD (hematological)</td>
<td>Breast</td>
<td>Curative</td>
</tr>
</tbody>
</table>

Scenario 1 would not be funded as ABVD is not an evidence-informed regimen for breast. What is suspected is that this patient was a breast cancer patient and subsequently developed a new (hematological) malignancy; however, the disease/diagnosis was never updated.

### Scenario 2

<table>
<thead>
<tr>
<th>Regimen</th>
<th>Disease Site</th>
<th>Treatment Intent</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEMC</td>
<td>Breast</td>
<td>Curative</td>
</tr>
</tbody>
</table>

Scenario 2 would not be funded as GEMC is an evidence-informed regimen for breast, palliative intent only. What is suspected is that this patient was a curative breast cancer patient previously; however, the treatment intent was not updated/properly reported when starting on the palliative regimen.
7.0 Service capacity planning

7.1 Systemic Treatment Services in Ontario

In 2007, CCO released the Standards for the Organization and Delivery of Systemic Treatment ("The Standards") which outlined the role and requirements of facilities in order to provide safe systemic treatment closer to home. Amongst the recommendations within The Standards was a description of "Level 1-4" facilities:

- Level 1 and 2 facilities are Cancer Centers which provide a full range of services including highly-specialized chemotherapy. All level 1 & 2 facilities are defined as "large community" hospitals with integrated cancer programs.

- Level 3 facilities have full time medical oncologists on site who determine the treatment plan, but these facilities do not provide high-complexity systemic treatment. All level 3 facilities are defined as "large community" hospitals.

- Level 4 (L4) facilities act as satellites of cancer centers and provide a portion of a patient’s cancer treatment. Level 4 facilities do not have a medical oncologist on site full time and, therefore, care is provided with the oversight of the Cancer Centre. The Standards advocate for a formal relationship between the Regional Cancer Centre and the Level 4 facility, both at the clinical and administrative level. It should be noted that approximately 50% of level 4 facilities fall into the MOHLTC definition of “Small Hospitals”.

Some key differences between Level 1 to 4 based on complexity of care are illustrated in Figure 18.

Figure 18: Key Differences between Facility Levels Based on Complexity of Care

<table>
<thead>
<tr>
<th>Complexity</th>
<th>Level 1 (RCC)</th>
<th>Level 2 (RCC)</th>
<th>Level 3 (Affiliate)</th>
<th>Level 4 (Satellite)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Investigational New Drug Program</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>High complexity procedures including: Concurrent Head and Neck Chemorads and/or Radiolabelled Conjugates</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Medical oncologist on site determines treatment plan</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>1st dose of high risk systemic treatment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>All other systemic treatment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

✓ = Yes,  X = No; Chemorads = chemotherapy in combination with radiation therapy; RCC = regional cancer centre.
7.2 Level 4 Funding Approach

Under the previous lifetime payment funding approach, there were various mechanisms for funding Level 4 facilities. Depending on the facility and the agreement between the Cancer Centre and CCO, funding might flow directly from CCO to the L4 facility or flow through the RCC to the L4 facility. Additionally funding was either provided either at a per visit or a per case rate. Finally, multiple rates existed across the province.

The new systemic treatment funding model will ensure a standardized and equitable approach to the funding of L4 facilities in order to support a shared cared model. The funding approach ensures the achievement of the funding model principle of promoting equitable access to patient care while supporting care closer to home.

Several approaches to the funding of Level 4 facilities were considered and modeled. A Level 4/Shared Care model sub-group, consisting of representation from both Regional Cancer Centres and L4 facilities, determined that funding at a per treatment visit rate which includes components for delivery of a treatment (nursing, pharmacy, supplies etc..) as well as a component for clinic visit costs best met the above criteria. Therefore, it is recommended that funding for L4 facilities be provided from the RCC, in a model of number of treatment visits x a provincial L4 funding rate.

To support this funding approach, RCCs will need to have agreements in place with all L4 facilities that they are funding. For these agreements, CCO will develop a document with the data and funding requirements that need to be in place between the RCC and the L4 facility. In addition, CCO will develop a standard report to help identify the details required for funding and to enable regular monitoring of volumes across facilities.

Over the next year CCO will be reviewing all quality standards and guidelines that all facilities, including L4s, must achieve in order to be eligible for funding. Further communication about this process will be forthcoming in future briefing notes and is anticipated for April 2015 implementation.

8.0 Performance evaluation and feedback

A performance and evaluation indicators framework has been developed for the Systemic Treatment Funding Model QBP. Several indicators have been identified for development and will be used for performance evaluation;

1. Percent of patients on evidence informed practice
   - As funding is tied to evidence informed practice, there should be a decrease in non-evidence informed practice

2. Percent of benign hematology patients
   - Benign hematology cases are outside of the scope of funding for CCO
• Under the new systemic treatment funding model, funding for benign cases will be phased out in a multi-year step-wise approach

3. Percent of data quality errors (several common DQ errors include miscoded intent, unknown intent, and non-evidence informed regimens)

CCO will continue to work to develop new and refine and monitor performance evaluators.

In introducing the QBPs the ministry has a strong interest in:

1. Supporting monitoring and evaluation of the impact (intended and unintended) of the introduction of QBPs
2. Providing benchmark information for clinicians and administrators that will enable mutual learning and promote on-going quality improvement
3. Providing performance-based information back to Expert Panels to evaluate the impact of their work and update as required in real time

There was recognition that reporting on a few system-level indicators alone would not be sufficient to meet the ministry’s aim of informing and enabling quality improvement initiatives at the provider-level. Therefore measures meaningful to hospitals and clinicians that are interpretable and have demonstrable value in improving the quality of care provided to patients are also of utmost importance.

To guide the selection and development of relevant indicators for each QBP, the ministry, in consultation with experts in evaluation and performance measurement, developed an approach based on the policy objectives of the QBPs and a set of guiding principles. This resulted in the creation of an integrated scorecard with the following six quality domains:

• Effectiveness (including safety)
• Appropriateness
• Integration
• Efficiency
• Access
• Patient-centeredness

The scorecard is based on the following guiding principles:

• **Relevance** – the scorecard should accurately measure the response of the system to introducing QBPs
• **Importance** – to facilitate improvement, the indicators should be meaningful for all potential stakeholders (patients, clinicians, administrators, LHINs and the ministry)
• **Alignment** – the scorecard should align with other indicator-related initiatives where appropriate

• **Evidence** – the indicators in the integrated scorecard need to be scientifically sound or at least measure what is intended and accepted by the respective community (clinicians, administrators and/or policy-decision makers)

A set of evaluation questions was identified for each of the QBP policy objectives outlining what the ministry would need to know in order to understand the intended and unintended impact of the introduction of QBPs. These questions were translated into key provincial indicators resulting in a QBP scorecard (see table below).

<table>
<thead>
<tr>
<th>Quality Domain</th>
<th>What is being measured?</th>
<th>Key provincial indicators</th>
</tr>
</thead>
</table>
| **Effectiveness** | What are the results of care received by patients and do the results vary across providers that cannot be explained by population characteristics as well as is care provided without harm? | 1. Proportion of QBPs that improved outcomes  
2. Proportion of QBPs that reduced variation in outcome  
3. Proportion of (relevant) QBPs that reduced rates of adverse events and infections |
| Appropriate ness | Is patient care being provided according to scientific knowledge and in a way that avoids overuse, underuse or misuse? | 4. Proportion of QBPs that reduced variation in utilization  
5. Proportion of (relevant) QBPs that saw a substitution from inpatient to outpatient/day surgery  
6. Proportion of (relevant) QBPs that saw a substitution to less invasive procedures  
7. Increased rate of patients being involved in treatment decision  
8. Proportion of (relevant) QBPs that saw an increase in discharge dispositions into the community |
| Integration | Are all parts of the health system organized, connected and work with another to provide high quality care? | 9. Reduction in 30-day readmissions rate (if relevant)  
10. Improved access to appropriate primary and community care including for example psychosocial support (e.g. personal, family, financial, employment and/or social needs)  
11. Coordination of care (TBD)  
12. Involvement of family (TBD) |
<p>| Efficiency | Does the system make best use of available resources to yield maximum benefit ensuring that the system is sustainable for the long term? | 13. Actual costs vs. QBP price |</p>
<table>
<thead>
<tr>
<th>Quality Domain</th>
<th>What is being measured?</th>
<th>Key provincial indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>Are those in need of care able to access services when needed?</td>
<td>14. Increase in wait times for QBPs / for specific populations for QBP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15. Increase in wait times for other procedures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16. Increase in distance patients have to travel to receive the appropriate care related to the QBP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17. Proportion of providers with a significant change in resource intensity weights (RIW)</td>
</tr>
<tr>
<td>Patient-Centeredness</td>
<td>Is the patient/user at the center of the care delivery and is there respect for and involvement of patients’ values, preferences and expressed needs in the care they receive? (TBC)</td>
<td>18. Increased rate of patients being involved in treatment decision</td>
</tr>
<tr>
<td>(to be further developed)</td>
<td></td>
<td>19. Coordination of care (TBD)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20. Involvement of family (TBD)</td>
</tr>
</tbody>
</table>

It should be noted that although not explicitly mentioned as a separate domain, the equity component of quality of care is reflected across the six domains of the scorecard and will be assessed by stratifying indicator results by key demographic variables and assessing comparability of findings across sub-groups. Where appropriate, the indicators will be risk-adjusted for important markers of patient complexity so that they will provide an accurate representation of the quality of care being provided to patients.

The ministry and experts recognized that to be meaningful for clinicians and administrators, it is important to tie indicators to clinical guidelines and care standards. Hence, advisory groups that developed the best practices were asked to translate the provincial-level indicators into QBP-specific indicators. In consulting the advisory groups for this purpose, the ministry was interested in identifying indicators both for which provincial data is readily available to calculate and those for which new information would be required. Measures in the latter category are intended to guide future discussion with ministry partners regarding how identified data gaps might be addressed.

In developing the integrated scorecard approach, the ministry recognized the different users of the indicators and envisioned each distinct set of measures as an inter-related cascade of information. That is, the sets of indicators each contain a number of system or provincial level measures that are impacted by other indicators or driving factors that are most relevant at the Local Health Integration Networks (LHINs), hospital or individual clinician level. The indicators will enable the province and its partners to monitor and evaluate the quality of care and allow for benchmarking across organizations and clinicians. This will in turn support quality improvement and enable target setting for each QBP to ensure that the focus is on providing high quality care, as opposed to solely reducing costs.
It is important to note that process-related indicators selected by the expert panels will be most relevant at the provider level. The full list of these measures is intended to function as a 'menu' of information that can assist administrators and clinicians in identifying areas for quality improvement. For example, individual providers can review patient-level results in conjunction with supplementary demographic, financial and other statistical information to help target care processes that might be re-engineered to help ensure that high-quality care is provided to patients.

Baseline reports and regular updates on QBP specific indicators will be included as appendices to each QBP Clinical Handbook. Reports will be supplemented with technical information outlining how results were calculated along with LHIN and provincial-level results that contextualize relative performance. Baseline reports will also be accompanied by facility-level information that will facilitate sharing of best practices and target setting at the provider-level.

The ministry recognizes that the evaluation process will be on-going and will require extensive collaboration with researchers, clinicians, administrators and other relevant stakeholders to develop, measure, report, evaluate and, if required, revise and/or include additional indicators to ensure that the information needs of its users are met.

9.0 Support for Change

In addition to the tools described in section 5.1, the CCO team is available to provide support to facilities at any time. Please send any inquiries to: STFM@cancercare.on.ca

Clinical information will be provided to facilities on an ongoing basis via the systemic funding model website.

CCO held a number of clinically focused videoconferences from January to March 2014. Clinical engagement sessions will continue to be hosted by CCO on an ongoing basis.

The ministry, in collaboration with its partners, will deploy a number of field supports to support adoption of the funding policy. These supports include:

- **Committed clinical engagement** with representation from cross-sectoral health sector leadership and clinicians to champion change through the development of standards of care and the development of evidence-informed patient clinical pathways for the QBPs.

- **Dedicated multidisciplinary clinical expert group** that seek clearly defined purposes, structures, processes and tools which are fundamental for helping to navigate the course of change.
• **Strengthened relationships with ministry partners and supporting agencies** to seek input on the development and implementation of QBP policy, disseminate quality improvement tools, and support service capacity planning.

• **Alignment with quality levers such as the Quality Improvement Plans (QIPs).** QIPs strengthen the linkage between quality and funding and facilitate communication between the hospital board, administration, providers and public on the hospitals' plans for quality improvement and enhancement of patient-centered care.

• **Deployment of a Provincial Scale Applied Learning Strategy known as IDEAS (Improving the Delivery of Excellence Across Sectors).** IDEAS is Ontario’s investment in field-driven capacity building for improvement. Its mission is to help build a high-performing health system by training a cadre of health system change agents that can support an approach to improvement of quality and value in Ontario.

We hope that these supports, including this Clinical Handbook, will help facilitate a sustainable dialogue between hospital administration, clinicians, and staff on the underlying evidence guiding QBP implementation. The field supports are intended to complement the quality improvement processes currently underway in your organization.
10.0 Frequently Asked Clinical Questions

**Question:** Where can I find a list of all evidence-informed (funded via the systemic treatment funding model) regimens?

**Answer:** For a listing of evidence-informed regimens please visit: www.cancercare.on.ca/STFM

**Question:** Our physicians would like to prescribe a regimen that is not on the list of evidence-informed regimens. What are the implications for funding?

**Answer:**
- Only evidence-informed regimens will be funded via the systemic treatment funding model.
- For a listing of evidence-informed regimens please visit: www.cancercare.on.ca/STFM. The list of regimens will be updated on a regular basis to ensure alignment with current clinical practice.
- If the regimen should be considered for addition to the list, please complete the Regimen Request Form available on the webpage and submit to STFM@cancercare.on.ca.

**Question:** We have noticed that some palliative regimens are listed as adjuvant/curative on the KTE packages provided, for example, CYBORD.

**Answer:**
- The adjuvant/curative treatment funding is funded based on a full course of treatment.
- There are a number of hematology regimens where, despite the fact that the treatment is palliative, most patients receive a full course of treatment.
- These regimens, including CYBORD, will be funded as a full course of treatment (the same as the adjuvant/curative regimens) instead of on a monthly, time-based approach.
- It is very important that the correct treatment intent for the patient be reported for all regimens.
- These palliative (course of treatment) regimens will be funded as a full course of treatment even when the treatment intent reported is palliative.

**Question:** Can we use the same regimen code for more than one regimen? For example AC for breast cancer is on both the adjuvant and palliative monthly lists. Are separate codes required?

**Answer:**
There are a number of regimens which can be used in both the adjuvant/curative setting and palliative setting, such as AC. The same regimen code is used and reported in either setting, the treatment intent must be reported appropriately to ensure the correct funding.
**Question:** What is the funding impact if we have to substitute drugs in cases of those who have side effects? For example, switching a patient from Cisplatin to Carboplatin with concurrent radiation.

**Answer:**
- The systemic treatment funding model would fund at the rate of the regimen intended to be delivered at the start of treatment (in this scenario a full course of CISP-RT).
- CCO would not fund for 2 courses of adjuvant/curative treatment.

**Question:** For palliative regimens, is the Systemic Treatment Funding Model specific about the line of therapy or is that only for NDFP funding and not the visits/other drugs?

**Answer:**
- Line of therapy is currently not a factor in determining funding via the systemic treatment funding model, although it may be important to drug procurement from NDFP.
- Treatment funding is determined by 3 data elements (as reported to ALR):
  - Disease Site + Treatment Intent + Regimen
  - If a regimen is considered evidence informed for a particular disease site and treatment intent, funding is triggered

**Question:** Where do the pseudo-adjuvant treatments fall? For example, a colon cancer patient with lung or liver mets, on curative therapy, pre-surgery or post-surgery.

**Answer:** From a funding model perspective, both of these scenarios would be treated as adjuvant. If pseudo adjuvant treatment or multi-modal treatment is given for possible adjuvant/curative intent, it is considered as adjuvant and should be reported as such.

**Question:** If CCO approves a drug by appeal or in the case-by-case program does the funding model cover the administration of the drug or regimen?

**Answer:** there are two scenarios to consider:
- **Evidence Building**
  - CCO will add regimens reviewed through this process to its list of evidence-informed regimens in real time.
- **Case by Case Review**
  - Regimens undergoing case by case review may take longer to reconcile, but a treatment bundle will also support the delivery of the drug approved by PDRP.
  - The operational details for ensuring funding are currently being developed, but in either case, CCO will ensure that appropriate funding is provided.

**Question:** What is to be reported to ALR if at the start of treatment, the plan is to treat a patient with FOLFIRI+BEVA but the Bevacizumab will be held for the first few cycles?

**Answer:**
- At the start of treatment, report the regimen intended for the patient.
In the scenario provided report FOLFIRI+BEVA
STFM will fund the monthly palliative band for the intended regimen.

**Question:** What is to be reported to ALR if at the start of treatment the plan is to treat a patient with FOLFIRI but part way through treatment, it is decided to add Bevacizumab to the patient’s treatment?

**Answer:**
- At the start of treatment report FOLFIRI as the intended regimen for the patient.
- If/when the treatment plan changes, update the intended regimen to FOLFIRI+BEVA
- Please note that funding for Bevacizumab in this situation needs to be confirmed with NDFP before starting treatment as it would not fulfill current NDFP criteria.

**Question:** What is to be reported to ALR if at the start of treatment, a patient’s HER2 status is pending (IHC equivocal; FISH pending)? Do we change the regimen?

**Answer:**
- If at the start of treatment, it is not known whether the patient will receive Trastuzumab (HER 2 is pending) report the chemotherapy regimen without the TRAS.
- If the treatment plan changes (TRAS is added when HER2 is confirmed), update the regimen as appropriate (XX_REGIMEN+TRAS).
- In the adjuvant/curative setting, only 1 bundled payment (for a full course of treatment) would be provided.
  - If there is evidence of 2 adjuvant/curative regimens back-to-back, CCO will reconcile on a case by case basis.
- With regimen changes in the palliative setting, as funding is provided using a monthly time-based approach, the funding amount could change from month to month based on the regimen reported.

**Question:** How should bisphosphonates be reported to ALR?

**Answer:** If a patient is on both chemotherapy and a bisphosphonate report both as two separate regimens.

**Question:** Is Pamidronate (or other supportive drugs/ bisphosphonates) considered a line of therapy and what should be reported to ALR?

**Answer:** Pamidronate is considered an evidence-informed palliative regimen for breast and myeloma. Line of therapy reported to ALR does not have an impact on funding provided through the systemic treatment funding model but still needs to be reported to ALR and NDFP.
## 11.0 Membership

<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE</th>
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