Brant Community Healthcare System
Strategic Operation Review

Final Report
May 6, 2016
The team from EY wishes to thank all of those who contributed their thoughts, ideas and challenges to our questions about how the hospital could improve its financial position and continue to deliver excellent care to its community. We respect your passion for what you do.
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Executive Summary
Introduction

In January 2016, Brant Community Healthcare System (BCHS) engaged EY to conduct a 3-month Operational Review. The goals of the Strategic Operational Review were to:

► Identify and prioritize opportunities for improvement in operations and management;
► Recommend actions and responsibilities to achieve the improvements including maximizing revenue;
► Provide recommendations regarding transformational change in operations and clinical services provided to ensure financial stability in a funding environment of Health-Based Allocation Model (HBAM) and Quality-Based Procedures (QBPs);
► Provide tools and knowledge transfer to enable the Hospital to conduct future reviews independently in order to improve decision-making and planning by management;
► Assess roles and responsibilities to optimize scope of practice among staff; and
► Identify potential savings for each recommendation.

The Review was an organization-wide initiative, designed to identify in-year savings for 2016/17 and develop a plan to realize those savings in future years. The review consisted for the following key elements:

► The deficit for 15/16 is $3.8M and the anticipated 16/17 and 17/18 deficits are $6M and $9M, respectively.
► A clear organizational roadmap has been developed which will support short and longer term opportunities and as well as an implementation roadmap which will help guide sustainable improvement.
► All opportunities and action plans have been informed by contributions from internal and external interviews, the Project Working Groups and Steering Committee.
► Although some selected investments may be required, these have not been explicitly addressed.
Total Savings Opportunity (at 100% capture)

Full realization of the savings will be based on executing specific projects and organizing a rigorous plan for the improvement work. This will be supported by the implementation of a Program Management Office (PMO) with clear BCHS ownership for delivery, including physician leadership. In addition, organizational enablers such as physician and organization structure, operating plan and financial accountability frameworks will also be required.

Figure 1: Total Savings Opportunity, All Streams ($,000)

BCHS will need to achieve 12% of identified savings to meet FY16 savings target. The majority of identified savings are recurring.
The Hospital has Significant Opportunity for Savings

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Actions</th>
<th>Potential Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Improve management of inpatient beds and length of stay</strong></td>
<td>This can be achieved through a variety of consistent actions such as: reducing less than 1 day stays, reduce the number of internal patient moves, implement consistent discharge methods, develop engagement and implementation plans with community partners to define service delivery options for selected ALC patients, implement guidelines and reduce inappropriate ED admissions and review options for better diversion and streaming of patients.</td>
<td><strong>$11.2M</strong></td>
</tr>
<tr>
<td><strong>2. Improve staff scheduling, staff allocation and reduce overtime across all areas of the hospital. Continue to implement sick time management strategies</strong></td>
<td>Implement optimal scheduling and replacement practices, reduce nursing/PSW overtime cost by using more casuals and/or float pool, limit OT for other non-clinical staff (including lieu time), move to a 60/40 or better full to part time mix, establish corporate controls and escalation processes to monitor and manage overtime, level set budgeted vs scheduled vs actual staffing, determine and agree on the appropriate staffing levels by inpatient units, develop consistent spans of control for similar roles, increase clarity and accountability for roles and functions and set priorities for resource allocation for projects and review quarterly.</td>
<td><strong>$1.9M</strong></td>
</tr>
<tr>
<td><strong>3. Improve management of OR services</strong></td>
<td>Implement measures for greater predictability and management of case length and block scheduling, start times and turn around, track utilization of assigned time by surgeon and service, improve pre-op clinic utilization, plan and track surgical QBP volume monthly and cost in order to maximize revenue.</td>
<td><strong>$650k</strong></td>
</tr>
</tbody>
</table>
### Recommendations, continued

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Actions</th>
<th>Potential Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Implement more stringent financial controls across the hospital</td>
<td>Reduce discretionary spend and increase spend controls across all areas of the organization, implement, quick win, near-term opportunities, implement Value Stream and Program budget control mechanisms and variance management, implement pro-active budget planning cycle, increase implementation of managed services opportunities, review equipment inventory, tracking and replacement mechanisms, develop performance and data quality management practices, including capture / input, storage and analysis, review data documentation and coding practices to ensure accurate capture of complexity, enforce cost recovery practices, including physician reimbursement and private pay activity.</td>
<td>$1.6M</td>
</tr>
<tr>
<td>5. Redesign, optimize and divest selected programs and services</td>
<td>Review and set targets for broader implementation of “Choosing Wisely” activity, including over testing, repeat testing, outdated procedures, and rationalization of low volume testing, develop operational and financial impact assessment and implementation plan for the closure of the Willett hospital, rationalize community partner contracts and relationships, including outsource and sharesource contracts, expand selected, strategic regional roles, such as regional pathology to maximize capacity and generate revenue, define fit for delivering service at BCHS (e.g. selected ambulatory and outpatient activity) with another hospital or community partners, assess volume and staffing allocation for selected programs e.g. outpatient mental health and day program.</td>
<td>$7.2M</td>
</tr>
</tbody>
</table>
## Recommendations, continued

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Actions</th>
<th>Potential Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Organization Realignment</td>
<td>Realignment to better support the patient journey and similar/connected clinical activity (e.g. ED and Medicine), combine specific similar program activities (e.g. all outpatient activity), align support services to bring together similar roles and functions, implement clear and seamless Value Stream governance and accountability structures and reporting arrangements, implement standard spans of control, implement standard budget and utilization reviews monthly with associated action plans for budget variance.</td>
<td>$300k+</td>
</tr>
<tr>
<td>7. Review Physician organization structure, roles, accountability and selected stipends</td>
<td>Refine Physician Organization structure for improved internal alignment, expectations and role clarity. Refine Physician leadership roles and selected Value Stream Medical leadership roles, implement selected contractual relationships, establish clearer accountability for selected roles and align stipends. Engage physicians in the planning and questions to be asked and undertake a stipend review using comparator hospitals and assessing both administrative and clinical expectations.</td>
<td>Facilitator for Improvement Sustainability</td>
</tr>
<tr>
<td>8. Implement a 1 and 3 year operating plan</td>
<td>Define the BCHS operating model that aligns with delivering the organization’s strategy and builds a consistent view of priorities, actions and investments.</td>
<td>Facilitator for Improvement Sustainability</td>
</tr>
<tr>
<td>Recommendation</td>
<td>Actions</td>
<td>Potential Value</td>
</tr>
<tr>
<td>----------------</td>
<td>---------</td>
<td>-----------------</td>
</tr>
<tr>
<td>9. Improve clarity on organizational priorities, roles, decision making and accountability</td>
<td>Develop improved clarity on how the hospital is organized and structured, better defining reporting relationships, accountabilities, committees, committee objectives and responsibilities, transparent integration of the Improvement Program activities and directions into hospital “new normal” hospital operations, pro-active management of priority projects, aligned Physician structure and support.</td>
<td>Facilitator for Improvement Sustainability</td>
</tr>
<tr>
<td>10. Implement specific strategies to improve service and program financial and operational accountability</td>
<td>Develop a financial performance framework that defines how the hospital conducts works - standard processes, policies and integrated accountability that holds key individuals to account, effective and accurate management of information in support of service delivery, performance tracking and management, analytics driven from finance, clinical and activity data to provide a robust evidence base for action.</td>
<td>Facilitator for Improvement Sustainability</td>
</tr>
<tr>
<td>11. Implement a standard program management structure and processes for implementation of cost optimization projects</td>
<td>A clear operational support structure for BCHS through which targeted operational and financial improvement and change capacity can be deployed to Value Streams, programs and services. Alignment with the Quality and Strategic activities and reporting to support implementation of the operational improvement. Rigorous reporting on progress and any variance via the benefits tracker.</td>
<td>Facilitator for Improvement Sustainability</td>
</tr>
<tr>
<td>12. Continued focus on community partnerships and service, program integration</td>
<td>To achieve many of the opportunities coming from the review, the hospital will need to continue to access, establish and build relationships and partnering opportunities with community and other hospitals to leverage expertise, resources and capacity.</td>
<td>Facilitator for Improvement Sustainability</td>
</tr>
</tbody>
</table>
Section 1

Introduction
Approach and Methodology
### Approach to the Strategic Operational Review

To provide a comprehensive view of the organization and facilitate broad participation, EY developed the following plan to realize the identified necessary savings. There was strong engagement from the organization during this process.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Outcomes</th>
<th></th>
<th>Summary Analysis and Final Report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Initiation Consultations and Data Analysis</strong></td>
<td><strong>Current state analysis</strong></td>
<td><strong>Opportunity validation</strong></td>
<td><strong>Final report and implementation plan</strong></td>
</tr>
<tr>
<td>► Stakeholders consultations</td>
<td>► Preliminary gross opportunities</td>
<td>► Program management plan</td>
<td>► Organizational enablers</td>
</tr>
<tr>
<td>► 80+ interviews and consultations with internal and external stakeholders</td>
<td>► Near term financial opportunities</td>
<td>► Identified strategic enablers</td>
<td></td>
</tr>
<tr>
<td>► Meetings with MAC and Quarterly Staff</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>► Content review sessions with Value Streams and Program and Service Leaders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Activity observations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Data collection and analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>► 50+ documents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>► 300,000+ lines of data</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Targeted Working Group and Review Sessions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>► 16 Working Group Sessions with over 150 participants across all areas of the organization and Value Streams: Acute and Transitional Care, Episodic and Outpatient Care; Planned Care; Care Support; Finance and Supply Support; Knowledge and Information; People and Development; PEQO; Strategy Deployment</td>
<td>► Opportunity validation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Weekly executive meetings and finding reviews</td>
<td>► Priority setting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>► Steering Committees</td>
<td>► Program management plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>► Identified strategic enablers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To provide a comprehensive view of the organization and facilitate broad participation, EY developed the following plan to realize the identified necessary savings. There was strong engagement from the organization during this process.
Methodology

The EY team leveraged its expertise in conducting strategic operation reviews and implementation services engagements across major hospitals and health systems in Canada, the United Kingdom, Australia and beyond to assess opportunities for BCHS in 4 key areas: Functional Optimization, Clinical Contribution, Core Business and Market/System Change. The team identified and quantified multiple areas of opportunity and provided a prioritized implementation plan to realize the savings with recommendations for deploying supporting infrastructure to maximize sustainability and pace of deployment.
Results Approach and Assumptions

Working with hospital stakeholders and decision makers, the team agreed on and leveraged a number of quantitative and qualitative sources of information to guide the calculation of gross opportunities. Whenever possible and appropriate, regional or provincial comparable data was used.

<table>
<thead>
<tr>
<th>Quantitative Datasets</th>
<th>Qualitative Inputs</th>
<th>Key Definitions and Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>National and provincial</td>
<td>- Working Groups</td>
<td><strong>Bed equivalents</strong> = (\text{LOS Days} / (365 \text{ days} * 90% \text{ utilization})); Opportunity calculated using estimated direct cost bed by bed type</td>
</tr>
<tr>
<td>- DAD (inpatient)</td>
<td>- Internal and External Stakeholders</td>
<td><strong>Capped utilization</strong> = opportunity calculated as opportunity cost of staffing based on underutilized time under 85% utilization OR number of OR block equivalents</td>
</tr>
<tr>
<td>- NACRS (ED and outpatient)</td>
<td>- Operational and clinical reports</td>
<td><strong>Workforce – OT</strong> = The opportunity for overtime was calculated:</td>
</tr>
<tr>
<td>- OMHRS (Mental Health)</td>
<td>- Finance and Decision Support review</td>
<td>- For nursing resources; the difference between using premium pay and casual/regular pay hours</td>
</tr>
<tr>
<td>- NRS (CCC and Rehab)</td>
<td></td>
<td>- For allied health, admin and other; reducing overtime hours to no more than 3% of total hours</td>
</tr>
<tr>
<td>- WTIS (Wait times)</td>
<td></td>
<td><strong>Workforce – Sick time</strong> = The opportunity for sick time was calculated as reducing sick time days to 8/year (3% of total hours)</td>
</tr>
<tr>
<td>Organizational</td>
<td></td>
<td><strong>Workforce – Staff optimization</strong> = calculated using the average cost of FTE type</td>
</tr>
<tr>
<td>- Meditech (statistics)</td>
<td></td>
<td><strong>Cost per Bed</strong> was calculated from OCDM data (example: Medicine $500ppd, CCU $1400ppd, Rehab/CCC $300ppd)</td>
</tr>
<tr>
<td>- ORIS (OR Utilization)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- MIS (utilization and census)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ad Hoc Hospital Reports where</td>
<td></td>
<td></td>
</tr>
<tr>
<td>standard data sets were not</td>
<td></td>
<td></td>
</tr>
<tr>
<td>available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full utilization and financial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>year to Oct 2015 was used and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>updated financial data to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YTD Jan 2016</td>
<td></td>
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</tr>
</tbody>
</table>
Summary  of Current State
Introduction

Brant Community Healthcare System (BCHS) is a regional community system serving a catchment population area of 120,000 in Brant County and surrounding areas. It is comprised of two sites – the Brantford General Hospital (BGH) and the Willett Hospital (TWH) with combined expenditures of $169.7M in FY14. A summary of key statistics are highlighted in the chart below.

<table>
<thead>
<tr>
<th>Statistics and Volumes (FY14)</th>
<th>Major Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient</td>
<td>Brantford General</td>
</tr>
<tr>
<td>• 262 beds</td>
<td>Bed types</td>
</tr>
<tr>
<td>• 12,259 separations</td>
<td>• Medicine</td>
</tr>
<tr>
<td>• 99,130 patient days</td>
<td>• Surgical</td>
</tr>
<tr>
<td>• 19% ALC days</td>
<td>• Med / Cardiac</td>
</tr>
<tr>
<td>Outpatient</td>
<td>• ICU/CCU</td>
</tr>
<tr>
<td>• ~90,000 clinic visits</td>
<td>• Obstetrics/</td>
</tr>
<tr>
<td>Emergency Department</td>
<td>Newborns/CCN</td>
</tr>
<tr>
<td>• 51,275 ED; 21,570 UCC visits</td>
<td>• Paediatric</td>
</tr>
<tr>
<td>• 13.4% ED admits</td>
<td>• Integrated Stroke</td>
</tr>
<tr>
<td>• 57% of all inpatients arrive from the ED</td>
<td></td>
</tr>
<tr>
<td>Operating Rooms</td>
<td>• Rehab/CCC</td>
</tr>
<tr>
<td>• 8 Main ORs</td>
<td>• Mental Health</td>
</tr>
<tr>
<td>• 9513 cases (2:1; DS:IP)</td>
<td></td>
</tr>
</tbody>
</table>

- Urgent care centre
- Outpatient medical imaging (X-Ray, US)
- Leased space
Over the past decade the hospital has had favourable financial performance, however due to changing demand and the fiscal environment the organization continues to bridge the gap between increasing operating costs and frozen provincial funding. As a result, the hospital has a deficit for 15/16 of $3.8M, the anticipated 16/17 deficit is $6M and $9M in year 3.

Figure 2: BCHS Financial Position - Annual Surplus (Deficit) FY12-14
BCHS aligns and manages its services along Value Streams, each with different average annual expenditure growth rates.

The expenses of the hospital as a whole has had an expenditure cumulative average growth rate of 2.5% over the past three fiscal years.

Total FTEs have increased at the same rate, with FY14 allotment of 1,188 (31% Nursing).
In FY14, BCHS ran at a combined 98% occupancy rate across all staffed inpatient beds with four units (MEDA, MEDD, MEDC and SURG) running over 100% on average. Length of stay (LOS) has seen a cumulative annual growth rate of 4% since FY12, with growth slowing between FY14 to FY15 to 1%. Average length of Stay (ALOS) has also seen an increase, with a cumulative annual growth rate of 3% over the same time period.

This increase in utilization can be attributed to an annual growth rate in discharges of 1% - patients are staying longer on average.

**Figure 4: Change in LOS FY 12/13 – 14/15**

<table>
<thead>
<tr>
<th>Acute LOS Growth Rate (DAD)</th>
<th>FY12 to FY13</th>
<th>FY13 to FY14</th>
<th>FY14 to FY15 (Forecast)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex Continuing Care</td>
<td>41%</td>
<td>20%</td>
<td>17%</td>
</tr>
<tr>
<td>Critical Care Service</td>
<td>-1%</td>
<td>6%</td>
<td>-7%</td>
</tr>
<tr>
<td>Emergency / Urgent Care</td>
<td>-20%</td>
<td>19%</td>
<td>-44%</td>
</tr>
<tr>
<td>Maternal Child</td>
<td>5%</td>
<td>1%</td>
<td>-6%</td>
</tr>
<tr>
<td>Medically Integrated Program</td>
<td>-1%</td>
<td>10%</td>
<td>23%</td>
</tr>
<tr>
<td>Peri-operative Services</td>
<td>-15%</td>
<td>-2%</td>
<td>-10%</td>
</tr>
<tr>
<td>Rehab &amp; Integrated Stroke (Acute)</td>
<td>261%</td>
<td>17%</td>
<td>-2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7%</td>
<td>8%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Figure 5: Total Discharges and ALOS FY12-15 (Forecast)**

**Figure 6: Average Census and Occupancy Rate, by Unit (FY14)**
HBAM Inpatient Grouping (HIG) weighted cases applies to Ontario inpatient data only, and represents the provincial acuity of patient groups (a score of 1.0 being average acuity).

Atypical cases carry significant higher weights than typical cases for all services. The average weight of these cases have factored heavily into the increase in total hospital case weights, with an cumulative annual growth rate of 8% since FY12, compared to 1% for typical cases.

Figure 7: Average LOS by IHG Case Type (FY12-15YTD)
Current State – Market Share

The majority of BCHS activity services the residents of Brantford and the immediate outlying communities. In FY14, 2/3 of the acute care discharges were Brantford residents, compared to 75% of general emergency and 53% of urgent care centre visits.

Figure 8: Acute Care discharges

Figure 9: General Emergency visits (BGH)

Figure 10: Urgent Care Centre visits (TWH)
Section 2
Key Findings and Opportunities
Clinical Programs – Beds and Patient Flow
The analysis plan was constructed to identify opportunities along the patient journey from admission through discharge and the various components that make up that stay. Key areas contributing to the total bed opportunity are set out in Figure 11 and include:

- Delayed Discharge
- Alternate Level of Care (ALC)

In addition, other opportunities exist to better manage LOS including:

- Managing time of Admission and Discharge
- Minimizing internal Patient Transfers

**Figure 11: Contribution to the Bed Opportunity**

**DATA CRITERIA:**
- All discharged patients from the last 3 fiscal years, with a focus on FY’14 performance

**EXCLUSION:**
- Atypical Cases in Delayed Discharges

**Pre-op LOS** = Most Responsible Procedure Date – Admit Date (pre-populated in DAD)

**Delayed Discharge (HIG)** = Total Typical LOS – Pre-Op LOS – HIG ELOS – ALC
*When Total LOS is <= ELOS, there is no delayed discharge

**ALC LOS** = Automatically captured in DAD, based on when patient identified as ALC

**Focus Areas of Opportunities**
The total gross inpatient bed equivalent opportunity represents a $11.2M savings potential for BCHS.

Through quantitative analysis of standard and internal datasets, focused working sessions across multiple clinical areas and stakeholder interviews, opportunities were identified, assessed and quantified.

A summary of gross bed equivalent (BE) opportunity is presented in Table 2.

### Table 2: Total Bed Opportunity

<table>
<thead>
<tr>
<th>Unit / Program – FY14</th>
<th>Delayed Discharge</th>
<th>ALC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medically Integrated Program</td>
<td>8.0</td>
<td>17.7</td>
<td>25.7</td>
</tr>
<tr>
<td>CCU</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Medical / Cardiac Unit</td>
<td>4.3</td>
<td>2</td>
<td>6.3</td>
</tr>
<tr>
<td>Critical Care Nursery</td>
<td>0.7</td>
<td>0</td>
<td>0.7</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>1.8</td>
<td>0.1</td>
<td>1.9</td>
</tr>
<tr>
<td>Paediatric</td>
<td>1.1</td>
<td>0.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Surgical</td>
<td>2.4</td>
<td>1.6</td>
<td>4.0</td>
</tr>
<tr>
<td>Integrated Stroke Unit</td>
<td>1.1</td>
<td>0.4</td>
<td>1.5</td>
</tr>
<tr>
<td>General Rehab</td>
<td>0.7</td>
<td>9.2</td>
<td>9.9</td>
</tr>
<tr>
<td>Complex Continuing Care</td>
<td>1.5</td>
<td>17.3</td>
<td>18.8</td>
</tr>
<tr>
<td>Mental Health</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL BEDS</td>
<td>21.7</td>
<td>48.6</td>
<td>70.3</td>
</tr>
</tbody>
</table>
The analysis identified multiple potential drivers to increased delayed discharges and ALC days.

There is an opportunity to better align and manage actual to expected day of discharge. Mechanisms to measure and track this performance should be put in place to inform clinical and operational decisions.

On average across the hospital, there is a significant difference between the number of weekday discharges and those occurring over the weekend. In combination with the overlay of expected day of discharge, which show that there are less than expected discharges over the weekend, this may signal that discharge practices over the weekend may lead to inpatients staying longer than necessary.
There is a 48 bed opportunity related to ALC improvement in FY14. Of that number, 40 beds are not related to those who are waiting for LTC.

Nearly 1 in 5 bed days discharged by BCHS in FY14 were ALC. Even though this metric is trending more favourably through FY15, there is still a significant opportunity to decrease ALC bed days and remove those beds from the hospital base.
87% of ALC patient days transferred to chronic care, general rehab or mental health inpatient services (46% of total ALC days discharged) were to a BCHS internal bed. This represents a 15.8 bed equivalent opportunity through better bed management. There is an additional 5%, or 2 bed, opportunity from patients being discharged home without supports – this pressure could be alleviated through better advanced and predictive discharge planning.

In contrast, 25% and 19% of total discharged acute ALC days were to long term care or CCAC services, respectively. This signals that the majority of ALC pressure could be managed by the hospital, and that plans could be quickly and purposefully put in place to alleviate this pressure and free up this bed capacity.

In the interest of providing the best care for ALC patients as they await placement in a more appropriate setting, it is recommended that BCHS review models of care that will enable the organization to provide the right care for these patients in the most cost effective manner possible, while supporting ongoing initiatives to expedite patient discharges. Collocating or ‘cohorting’ like-patients would provide savings opportunities through staffing adjustments, potentially reducing adverse events (such as exposure to nosocomial infections) and providing the appropriate care to enable transitions to another care environment.
Of patients who had a delayed discharge, 43% were delayed less than 1 day representing a 1.8 bed equivalent opportunity. This is a large number of patients that could possibly be managed by minor changes to discharge practices as 86% of that volume were discharged home without supports.

Effectively managing that patient population would free up capacity to identify and strategize how to better manage longer stay delayed patients, where 14% of total discharges representing 51% of total delayed days were for patients staying 5+ days than expected.
There is an opportunity to improve admission and discharge practices to earlier in the day to maximize the first day of care for patients. There are units that performed more favourably in this aspect, on average 19% of discharges occurred before 11am (a marker of access to beds) and 46% of patients were admitted after 3pm across the organization.
Beds & Patient Flow – Patient Transfer

In FY14, there were 18,130 total bed transfers across the hospital – some patients as many as 13 times. Table 3 summarizes this activity, noting that 41% of transfers were received from the ER, and 16% were for patients deemed to be off-service (requiring a different type/level of care) for the unit they were transferred to.

Table 3: Patient Transfer and Off Service Activity

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>ER Transfer</th>
<th>Off-Service</th>
<th>On-service</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>6,856</td>
<td>2,710</td>
<td>6,941</td>
<td>16,507</td>
</tr>
<tr>
<td>CCC</td>
<td>47</td>
<td>102</td>
<td>257</td>
<td>406</td>
</tr>
<tr>
<td>MH</td>
<td>536</td>
<td>17</td>
<td>414</td>
<td>967</td>
</tr>
<tr>
<td>Rehab</td>
<td>3</td>
<td>73</td>
<td>174</td>
<td>250</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7,442</td>
<td>2,902</td>
<td>7,786</td>
<td>18,130</td>
</tr>
</tbody>
</table>

Decreasing the need to transfer patients and manage off-service demand will have positive impact on patient flow and potentially reduce length of stay.
Minimizing unnecessary patient transfers can have many cumulative positive affects, including maximizing the continuous time patients receive appropriate care, minimizing the clinical and administrative work necessary to send and receive a patient transfer, and potentially reducing the total length of stay a patient requires in a hospital.

Limiting off-service patients also helps ensure that patients receive the right care in the right location by the right provider.

There will always be the need for appropriate bed transfers. The goal should be to purposefully plan for this activity, level it throughout the day and shift when possible, to align resources accordingly.

The heat map to the right shows transfer activity by time of day and day of week for acute units, showing a distribution towards later in the afternoon on weekdays. If not planned and controlled for, this activity could pose undue stress to staff and patients and possibly reduce the efficacy of care received during the rest of their stay that day.
BCHS manages a high volume of emergent visits across its two sites, BGH (General Emergency) and TWH (Urgent Care Centre). Cumulative 4-year annual growth rate in visits has been approximately 5% since FY12. This increase has placed pressure on the current physical plant, with plans to renovate and increase the footprint of the primary site being formalized. The distribution of visits by Canadian Triage and Acuity Scale (CTAS): majority of CTAS 4-5 being served at the Urgent Care Centre and CTAS 1-3 presenting at BGH. From FY12, the distribution of CTAS levels have not changed however the volume has increased.

Figure 17a: Emergency Visits by Site (FY12-15 Forecast)

Figure 17b: Emergency Volumes by CTAS score, by Site (FY14)
Better prediction and management of admissions through the ED will have add-on positive impacts to patient experience and inpatient pressures. ED admissions have increasingly become the entry point for inpatients, as greater than 13% of all ED visits converted to an admission in FY14. This has trended higher in FY15, with BCHS having 4% higher than peer high-volume community hospitals for %ED admissions.

It is recommended that appropriateness criteria for ED admissions be explicitly created and managed to ensure that the right patients are being admitted. An appropriateness flag is for those patients admitted through ED with less than 1 day LOS (excluding AWOL and deaths) – which show that those who fall in that category are typically admitted overnight. Mental health and paediatric patients also tend to fall in this category, with 54% of paediatric admissions through the ED having less than 1 day inpatient stays. It is thus recommended that interventions are targeted to specific patient groups for greatest impact.

**Figure 18a:** ED Admissions as a % of IP Admissions and ED Visits (FY12-15 YTD)

**Figure 18b:** ED Admissions with LOS <1 day, by Time of Day (FY14)
### Snapshot: Peer Hospital ED Admission Rates

#### High Volume Hospital ED Admission Rates (April to November 2015)

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>Admission Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queensway Carleton Hospital</td>
<td>8.9%</td>
</tr>
<tr>
<td>St. Mary's General Hospital</td>
<td>9.0%</td>
</tr>
<tr>
<td>Cambridge Memorial Hospital</td>
<td>9.2%</td>
</tr>
<tr>
<td>Bluewater Health - Norman Site</td>
<td>9.4%</td>
</tr>
<tr>
<td>Humber River Regional Hospital - Finch Street Site</td>
<td>9.6%</td>
</tr>
<tr>
<td>Rouge Valley Health System - Rouge Valley Centenary</td>
<td>10.3%</td>
</tr>
<tr>
<td>Scarborough Hospital - General Campus</td>
<td>10.7%</td>
</tr>
<tr>
<td>Peterborough Regional Health Centre</td>
<td>10.7%</td>
</tr>
<tr>
<td>Sault Area Hospital</td>
<td>10.7%</td>
</tr>
<tr>
<td>High Volume Community Hospital Group</td>
<td>11.0%</td>
</tr>
<tr>
<td>Guelph General Hospital</td>
<td>11.1%</td>
</tr>
<tr>
<td>Royal Victoria Regional Health Centre</td>
<td>11.6%</td>
</tr>
<tr>
<td>Toronto East General Hospital</td>
<td>11.7%</td>
</tr>
<tr>
<td>Windsor Regional Hospital - Metropolitan Campus</td>
<td>12.3%</td>
</tr>
<tr>
<td>Grand River Hospital - Kitchener-Waterloo Site</td>
<td>12.9%</td>
</tr>
<tr>
<td>Halton Healthcare Services - Oakville Trafalgar Memorial Hospital</td>
<td>13.9%</td>
</tr>
<tr>
<td>Windsor Regional Hospital - Ouellette Site</td>
<td>14.4%</td>
</tr>
<tr>
<td>William Osler Health Centre - Etobicoke General Hospital</td>
<td>14.8%</td>
</tr>
<tr>
<td>Brantford General Hospital</td>
<td>15.0%</td>
</tr>
<tr>
<td>Niagara Health System - St. Catherines General Site</td>
<td>15.3%</td>
</tr>
</tbody>
</table>

**Source:** Meeting with HNHB Emergency Department Physician Lead & LHIN Staff - January 2016
Beds & Patient Flow – ED Volume Strategy

It is recommended that BCHS also evaluates other diversion and volume management strategies to reduce the pressure on patient flow resulting in admissions. Schemes that have proven successful in other hospitals include:

► **Ambulatory “Hot Clinics”** - For both patients referred directly from the family MD or for patients suitable for “treat and release” protocols, this in-ED service would serve to prevent excessive ED LOS and inappropriate admissions. Patients would be triaged “at the door”, with service generally delivered by speciality (i.e. respiratory with discharges from the clinic including a management plan drawn up by the attending physician).

► **Observation / Short-stay Unit** – 12-24hr assessment for patients who do not require admission but require further observation before discharging. This reduces the number of patients being admitted straight to a ward and being “lost” within the system, reducing the number of 1-2 day stays.
Beds & Patient Flow - Recommendations

High Level Recommendations:

► Mechanisms to measure and track performance be put in place to inform clinical and operational decisions for patient care.
► Review and develop models of care that will enable the organization to care for these patients in the most cost effective manner possible, while supporting ongoing initiatives to expedite patient discharges.
► Appropriateness criteria for ED admissions be explicitly created and audited to ensure that the right patients are being admitted.
► Bed and patient flow interventions be targeted to specific patient groups for greatest efficacy.
► Identify and implement diversion and volume management strategies to reduce the pressure on patient flow resulting from ED admissions.
► Patient transfers be limited and more appropriately tracked to ensure patients maximize care time on the most appropriate units.

Benefits are related to improvements to:

► Mechanisms to set targets, measure and track bed demand and capacity
► Patient transfer and discharge practices, policies and procedures
► Admission criteria
► Management of ED volumes and flow to inpatient units
► Cohorting of ALC patients

<table>
<thead>
<tr>
<th>Total Gross Opportunity</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beds &amp; Patient Flow</td>
<td>$11.2M</td>
<td>30%</td>
<td>30%</td>
<td>30%</td>
</tr>
</tbody>
</table>
OR Improvement
Using a multi-pronged approach of quantitative utilization analysis, working sessions with clinical, operational and surgeon input, as well as other stakeholder interviews and observations, we assessed the performance of the service with the objectives to:

► Assess the capacity and utilization of OR resources.
► Reduce costs and improve opportunities to maximize revenue.
► Improve predictability of service demand.

The analysis focused on pre-operative and in-OR activity, including booking, scheduling and use of resources.

Using 85% ‘capped utilization’ as the benchmark for productivity, appropriate utilization of perioperative resources was assessed. This was a different approach to what is currently used at BCHS which resulted in under-identification of capacity opportunities.
Definition of OR Utilization

**Current State**

*Calculation:* summation of individual case lengths within the block from Patient in-room to Patient out-of-room divided by the total block length. Calculation includes:
- turn-around time
- procedure time that runs over booked time

**Capped Utilization**

*Calculation:* summation of individual case lengths within the block from Patient in room to Patient out of room divided by the total block length
- **Excluding:** turn-around time, and proportion of procedure time that runs over booked time
- Turn-around time is not attributed to unique physicians, only room and/or service
- Turn-around time is accounted for in the unutilized block portion (e.g. 15%)

As calculation only accounts for patient in and out of OR, OR switches do not impact room utilization.
There are two ways for BCHS to act on and capture the opportunities presented. At a high level, the options include:

1. Continue performing the same level of activity for less (e.g. reducing OR blocks and rooms); or
2. Performing more activity in the freed-up capacity for revenue positive cases.

It is recommended that a strategic and detailed look at both options is considered. Potential areas of focus for achieving both future states is discussed in the coming sections.
In FY14, BCHS performed 9,309 surgical cases in 5,729 surgical hours through its 8 main OR rooms. Capped utilization of these rooms ranged from 58 – 71%, as per Figure 19.

When compared to the 85% capped utilization benchmark, this underutilized time accounts for 2,400 annual hours and $270K of staffing opportunity cost (using an average staffing complement of 2 RNs and 0.5 RPNs per OR room). If assuming an elective OR can be opened 240 days per year, 8 hours per day, this underutilized time equates to a **full single OR’s worth** of surgical activity.

Additionally, if each OR did open 5 days per week, 48 weeks per year (240 days), maximizing the annual usage of the rooms, an additional potential 2,400 hours of operating time could be opened up.
Effectively utilizing OR blocks start with effective booking and scheduling of rooms and controls associated with managing within those timeframes. In FY14, 20% of cases started more than 30 minutes late while 42% of cases finished more than 30 minutes early. There is variation between services for both metrics start and finish metrics, and it is recommended that any proposed initiatives to mitigate these findings is service specific.

In FY14, there was a total opportunity of 1,400 unused open block hours due to late starts and early finishes.
Although 62% of all booked cases were completed within 10 minutes of their booked case length, 15% took more than 30 minutes longer and 6% were completed 30 minutes or more earlier than expected. Putting in place mechanisms to better predict case lengths, such as adding complexity categorization to procedures for booking and comparison purposes, and purposefully reviewing booked versus actual case length variation, will allow for schedules to be built that better mirror actual future activity needs.

Figure 21: Booked vs Actual Time (FY14)
Each patient booked for surgery has a pre-op clinic visit. There are opportunities to better manage these volumes by:

- Refreshing pre-op clinic protocols e.g. referral time before surgery, settings standards on completeness of documentation, standard documentation.
- Identifying appropriate patient groups through a triage process that would benefit by having a virtual (e.g. phone) consultation or a modified assessment.
- Reducing unnecessary and duplicate testing, aligned with the organization’s Choosing Wisely initiatives.
- Reducing multiple items of information collection from different professionals on the day of the pre-op visit.
- Removing the need for selected pre-op testing by having some tests completed and all results available prior to pre-op visit.
- Improving patient and provider communications around necessary paperwork and surgical preparation needs such as standard documentation, patient information and referral process.
- Improve scheduling to better manage daily volume.
Although cancellations had a minor impact, representing 1-3% of cases depending on service, almost a third of all cases were delayed. This ranged from 19 – 52% by service. It is recommended that additional data be collected to better understand the time impact of these delays into and out of the OR to provide focus on root causes.

Exactly, one third (32%) of surgical cases performed in FY14 were delayed.

**Figure 22: Case Delays – Delay as a % of Total Cases, by Service (FY14)**
It was found that surgical durations between and across procedures and physicians vary, in some cases by as much as 400%. Below shows an example of this variation, displaying median and spread of surgical times by unique orthopaedic procedures. Minimizing variation can have a positive quality and financial impact. It is recommended that BCHS:

► Assess accurate comparability of procedures within codes, potentially differentiating by first vs repeat and/or complexity.
► Review variation across physicians performing comparable procedures.
► For top procedures, measure case cost variation.
► Assess root causes of identified opportunities and implement changes to smooth the internal variation.

Managing the variation within services and by procedures will promote the uptake of leading practices and increased productivity.
It is important that margins be measured and understood for all surgical QBPs – maximizing margin positive cases and assessing strategic fit for margin negative cases. This represents an estimated $300K opportunity.

It is to the hospital’s benefit to understand the true costs of providing care even as the hospital is not a case costing hospital. It will be important for BCHS to measure, track and continuously assess the impact of performing revenue-per-procedure surgical QBPs. It is recommended that the organization conducts a thorough examination of the direct costs, their drivers and the expected margin for each procedure and manage to funded volumes.

The case on the following page shows a possible revenue impact scenario for performing FY14 procedures assessed against hospital-derived costs and QBP revenue per case. All cases show positive margin. However performing less than funded volumes leaves ‘money on the table’ in unrealizable margin, while doing more than funded volumes leaves the hospital performing excess cases at its own expense. This underscores again the necessity for clear and definitive volume and performance measurement of clinical activities.
The table above sets out four different surgical and care pathway QBPs of which BCHS receives funding. Surgical and LHIN managed QBPs represents approximately $12M in revenue for BCHS. Although not surgical, additional QBP volume for cancer care and other clinical activity is attached to revenue. Managing this volume and associated costs pro-actively can have a favourable for the hospital. Performing similar analysis for each QBP will allow for a complete view of the financial impact of providing care, informing strategic investment and divestment decisions.

### Table 4: QBP Volume and Margin

<table>
<thead>
<tr>
<th>Surgical QBPs – FY14</th>
<th>Target volume</th>
<th>Actual Volume</th>
<th>Variance</th>
<th>$rev per case</th>
<th>Variable costs</th>
<th>Margin per case</th>
<th>Financial impact ($,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Inpatient Primary Unilateral Hip Replacement</td>
<td>201</td>
<td>179</td>
<td>22</td>
<td>$9,029</td>
<td>$5,529</td>
<td>$3,500</td>
<td>$77</td>
</tr>
<tr>
<td>Acute Inpatient Primary Unilateral Knee Replacement</td>
<td>503</td>
<td>516</td>
<td>-13</td>
<td>$7,793</td>
<td>$5,193</td>
<td>$2,600</td>
<td>-$68</td>
</tr>
<tr>
<td>Acute Inpatient Knee Arthroscopy**</td>
<td>631</td>
<td>665</td>
<td>-34</td>
<td>$1,296</td>
<td>$656</td>
<td>$640</td>
<td>-$22</td>
</tr>
<tr>
<td>Acute Inpatient Tonsillectomy</td>
<td>275</td>
<td>282</td>
<td>-7</td>
<td>$1,157</td>
<td>$557</td>
<td>$600</td>
<td>-$4</td>
</tr>
</tbody>
</table>

**TOTAL net favourable financial impact if performed at target volume:** $171

NOTES:
- Knee arthroscopy was not funding in FY14
- Margin per case calculated using revenue per case less the typical variable cost of performing the procedure at BCHS (e.g. no allocation of fixed costs)
OR Services - Recommendations

High Level Recommendations:
► Assess the benefit of aligning OR with other booked BCHS activity within a Value Stream
► Detailed look at reducing the time OR blocks and rooms are open or performing more activity in newly freed-up capacity
► Thorough examination of the direct costs, their drivers and the expected margin for each surgical QBP and manage to funded volumes.
► Additional data be collected to better understand the time impact of delays into and out of the OR to provide focus on root causes.
► Assess accurate comparability of procedures within codes, potentially differentiating by first vs repeat and/or complexity.
► Review the performance variation (e.g. start and finish times) across physicians and services performing comparable procedures.
► Assess root causes of identified opportunities and implement changes to smooth the internal variation.
► Review utilization of block time assignment by physician and service.
► Review and update peri-op protocols and processes.

Benefits include:
► Improved perioperative booking and scheduling practices
► Maximized use of OR resources
► Maximized revenue and margin from surgical QBPs
► Improved tracking of patient flow days into and out of the OR
► Identified and reduced variation in surgical practice

<table>
<thead>
<tr>
<th>Total Gross Opportunity</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR Services</td>
<td>$0.6M</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
</tr>
</tbody>
</table>
Workforce Optimization
As with all health organizations, workforce represents the largest proportion of spend, representing 74% of BCHS FY14 expenditures. The appropriate management of this resource is central to the successful implementation of any improvement scheme undertaken.

Using financial and HR datasets, as well as conversations with service line leaders and key stakeholders, both clinical and non-clinical workforce was analysed with a focus in 4 areas of opportunity:

1. Managing overtime and sick time
2. Appropriate FT:PT mix
3. Nursing skill mix and impact of IPC (inter-professional care)
4. Assessing organizational role and skill requirements
A main goal of workforce management should be to put in place robust mechanisms to predict and plan for surges in demand and capacity and have flexible schedules to accommodate. As part of a broader budgeting and control review, it is recommended that BCHS undertakes this initiative. However, there may be times where stretching resources would be required to cover for unpredictable need, requiring overtime and sick time coverage.

The opportunity for overtime was calculated:

- For nursing resources; the difference between using premium pay and casual/regular pay hours
- For allied health, admin and other; reducing overtime hours to no more than 3% of total hours

The opportunity for sick time was calculated:

- For all resources, reducing sick time days to 8/year (3% of total hours)

For FY available o date (January 2016), BCHS is tracking 14% better in OT ($83,000 improved), and tracking 13% worse in sick time ($110,000 worse) representing a combined additional impact of $27,000.
Table 5 shows the opportunities by Value Stream and resource type. Nursing represented 79% and 52% of the overtime and sick time savings potential, respectively. With these metrics, as well as the fact that nursing represents approximately 40% of total hospital FTEs, it is recommended that schemes to realize workforce opportunities be targeted appropriately to managing those resources.
Similarly, it is recommended that schemes be targeted towards units with the largest sick time and overtime to identify root cause. The charts below show how the opportunities present themselves across all care units. Understanding the differences and the driving factors across these units is necessary to effectively develop mitigating initiatives.

One measure to prevent the need for premium pay is to have access to and deploy part-time and casual pool resources when needed. It is recommended that accountability agreements (e.g. number of allowed shift refusals) be put in place for pool resources to increase availability of these resources.

Table 6: All Units Summary of Sick Time and Overtime

<table>
<thead>
<tr>
<th>Inpatient Unit</th>
<th>Sick Time</th>
<th>Overtime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nursing</td>
<td>TOTAL</td>
</tr>
<tr>
<td></td>
<td>RN</td>
<td>RPN</td>
</tr>
<tr>
<td>Complex Continuing Care</td>
<td>14,696</td>
<td>-</td>
</tr>
<tr>
<td>CCU</td>
<td>24,051</td>
<td>-</td>
</tr>
<tr>
<td>Medical / Cardiac Program</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Medical Integrated Program</td>
<td>56,698</td>
<td>23,886</td>
</tr>
<tr>
<td>Integrated Stroke</td>
<td>-</td>
<td>14,383</td>
</tr>
<tr>
<td>General Rehab</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Surgical</td>
<td>-</td>
<td>25,125</td>
</tr>
<tr>
<td>CCN</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>74,554</td>
<td>12,229</td>
</tr>
<tr>
<td>Paeds</td>
<td>33,477</td>
<td>-</td>
</tr>
<tr>
<td>Mental Health</td>
<td>20,085</td>
<td>7,835</td>
</tr>
<tr>
<td>ED / UCC</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Operating Room</td>
<td>-</td>
<td>6,540</td>
</tr>
<tr>
<td>TOTAL</td>
<td>223,562</td>
<td>89,999</td>
</tr>
</tbody>
</table>
Some overtime has been paid at regular rates in the form of time in lieu, and some overtime was used to cover sick time. Although reducing overtime, this represents less than efficient use of resources and as such are taken into account with each opportunity. As a percentage of total overtime hours, sick time coverage was 22% and time in lieu was 27%. The chart to the right shows the distribution across Value Streams.

The nursing opportunity for People Development is attributed to the nursing pool managed through that cost centre.

### Table 7: Lieu Time Utilization

<table>
<thead>
<tr>
<th>Value Stream</th>
<th>%Sick coverage</th>
<th>%Lieu time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute and Transitional Care</td>
<td>38%</td>
<td>11%</td>
</tr>
<tr>
<td>Administration</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>Care Support</td>
<td>21%</td>
<td>43%</td>
</tr>
<tr>
<td>Episodic Care</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>Finance and Supply Chain</td>
<td>1%</td>
<td>80%</td>
</tr>
<tr>
<td>Knowledge and Information Management</td>
<td>10%</td>
<td>64%</td>
</tr>
<tr>
<td>Patient Experience and Quality Outcomes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>People Development</td>
<td>-</td>
<td>95%</td>
</tr>
<tr>
<td>Planned Care</td>
<td>25%</td>
<td>21%</td>
</tr>
<tr>
<td>Strategy Deployment</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Undistributed</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>22%</strong></td>
<td><strong>27%</strong></td>
</tr>
</tbody>
</table>
Staff mix (full time, part time and casual) opportunities include:

1. Maintaining an optimal FT/PT/Casual mix - a higher % FT may reduce flexibility for replacement leading to overtime
2. Monitor and manage F/T, P/T and Casual staff who work >1.0
3. Assess strategies to support staff sharing across units and re-assignment

It is our experience that a an optimal FT/PT contract mix is moving to a 60/40 full to part time for many hospital organizations. This increases staffing flexibility and mitigates the challenges of availability of a casual pool of nurses. Overall, BCHS has opportunity to move in this direction.

It is recommended that BCHS sets 60/40 full to part time staff targets by unit and set up mechanisms to track and hold units accountable to maintaining those ratios.

Table 8: Proportion of Full and Part Time Nursing Staff

<table>
<thead>
<tr>
<th>Inpatient units</th>
<th>RN FT</th>
<th>RN PT</th>
<th>RN CPT</th>
<th>RPN FT</th>
<th>RPN PT</th>
<th>RPN CPT</th>
<th>PSW FT</th>
<th>PSW PT</th>
<th>PSW CPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex Continuing Care</td>
<td>78%</td>
<td>14%</td>
<td>8%</td>
<td>64%</td>
<td>33%</td>
<td>3%</td>
<td>65%</td>
<td>35%</td>
<td>0%</td>
</tr>
<tr>
<td>CCU</td>
<td>73%</td>
<td>20%</td>
<td>6%</td>
<td>79%</td>
<td>0%</td>
<td>21%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Medical / Cardiac</td>
<td>55%</td>
<td>27%</td>
<td>17%</td>
<td>71%</td>
<td>25%</td>
<td>4%</td>
<td>8%</td>
<td>92%</td>
<td>0%</td>
</tr>
<tr>
<td>Medical Integrated Program</td>
<td>70%</td>
<td>24%</td>
<td>6%</td>
<td>71%</td>
<td>18%</td>
<td>12%</td>
<td>60%</td>
<td>36%</td>
<td>4%</td>
</tr>
<tr>
<td>Integrated Stroke</td>
<td>55%</td>
<td>30%</td>
<td>15%</td>
<td>79%</td>
<td>12%</td>
<td>9%</td>
<td>62%</td>
<td>38%</td>
<td>0%</td>
</tr>
<tr>
<td>General Rehab</td>
<td>36%</td>
<td>22%</td>
<td>42%</td>
<td>63%</td>
<td>30%</td>
<td>6%</td>
<td>66%</td>
<td>33%</td>
<td>1%</td>
</tr>
<tr>
<td>Surgical</td>
<td>66%</td>
<td>28%</td>
<td>6%</td>
<td>73%</td>
<td>18%</td>
<td>9%</td>
<td>72%</td>
<td>27%</td>
<td>1%</td>
</tr>
<tr>
<td>CCN</td>
<td>62%</td>
<td>26%</td>
<td>12%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>70%</td>
<td>22%</td>
<td>8%</td>
<td>66%</td>
<td>31%</td>
<td>3%</td>
<td>0%</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>73%</td>
<td>13%</td>
<td>15%</td>
<td>92%</td>
<td>8%</td>
<td>0%</td>
<td>45%</td>
<td>55%</td>
<td>0%</td>
</tr>
<tr>
<td>Mental Health</td>
<td>76%</td>
<td>19%</td>
<td>5%</td>
<td>76%</td>
<td>24%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>SubTotal</strong></td>
<td><strong>69%</strong></td>
<td><strong>22%</strong></td>
<td><strong>9%</strong></td>
<td><strong>70%</strong></td>
<td><strong>23%</strong></td>
<td><strong>7%</strong></td>
<td><strong>63%</strong></td>
<td><strong>36%</strong></td>
<td><strong>2%</strong></td>
</tr>
<tr>
<td>ED / UCC</td>
<td>65%</td>
<td>31%</td>
<td>4%</td>
<td>61%</td>
<td>27%</td>
<td>12%</td>
<td>30%</td>
<td>70%</td>
<td>0%</td>
</tr>
<tr>
<td>Operating Room</td>
<td>62%</td>
<td>35%</td>
<td>3%</td>
<td>71%</td>
<td>24%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>PD Central Resource</td>
<td><strong>78%</strong></td>
<td><strong>14%</strong></td>
<td><strong>8%</strong></td>
<td>69%</td>
<td>15%</td>
<td>16%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>ED Central Resource</td>
<td>65%</td>
<td>26%</td>
<td>9%</td>
<td>66%</td>
<td>24%</td>
<td>10%</td>
<td>24%</td>
<td>74%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>67%</strong></td>
<td><strong>25%</strong></td>
<td><strong>7%</strong></td>
<td><strong>69%</strong></td>
<td><strong>23%</strong></td>
<td><strong>8%</strong></td>
<td><strong>62%</strong></td>
<td><strong>36%</strong></td>
<td><strong>2%</strong></td>
</tr>
</tbody>
</table>
Workforce Optimization - IPC

Shifting to a higher ratio of RPNs and PSWs has had an estimated cost of resources impact of over $940K based on the change in skill mix since FY12.

BCHS has committed to the implementation of the Inter-Professional Care Model and has spent some time evaluating its progress and impact. Although the IPC work is not within the scope of this review, opportunities for alignment of IPC to the objectives of the review are within scope. In addition to a number of goals for IPC in relation to maximizing the use of nursing resources and facilitating optimal scope of practice, IPC can allocate resources to provide the greatest value and care to patients, increasing overall effectiveness. BCHS made an effort to do this by introducing an increased RPN and PSW nursing complement to allow for more highly trained RN resources to focus on more comprehensive scope of practice activities. The chart below shows the FY14 nursing skill mix by unit.

The skill mix in FY12 was 49 RN:41 RPN:10 PSW, a ratio which, if held constant, would have increased the FY14 workforce expense by $940K.

BCHS is in the process of continuing the IPC future state implementation. It is recommended that this is monitored to reflect patient profile and recognize comprehensive care needs.

### Table 9: Nursing Skill Mix (IPC) FY14

<table>
<thead>
<tr>
<th>Inpatient Unit</th>
<th>RN</th>
<th>RPN</th>
<th>PSW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex Continuing Care</td>
<td>12%</td>
<td>47%</td>
<td>41%</td>
</tr>
<tr>
<td>CCU</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Medical / Cardiac</td>
<td>53%</td>
<td>42%</td>
<td>5%</td>
</tr>
<tr>
<td>Medical Integrated Program</td>
<td>27%</td>
<td>44%</td>
<td>30%</td>
</tr>
<tr>
<td>Integrated Stroke</td>
<td>47%</td>
<td>32%</td>
<td>21%</td>
</tr>
<tr>
<td>General Rehab</td>
<td>1%</td>
<td>59%</td>
<td>40%</td>
</tr>
<tr>
<td>Surgical</td>
<td>32%</td>
<td>53%</td>
<td>15%</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>86%</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>Paeds</td>
<td>99%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Mental Health</td>
<td>69%</td>
<td>31%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>45%</td>
<td>36%</td>
<td>19%</td>
</tr>
</tbody>
</table>
There are opportunities to rationalize, consolidate and align job functions to link similar functions, reduce duplication of roles and increase role focus.

A recurring theme was the need to actively and purposefully match resource capacity with demand as well as fully leveraging resources. Below are examples related to similar roles in different areas of the hospital or over establishment of resources.

**Similar Roles in PEQO, People and Development and Strategy Deployment**

These are important functions for the organization and the three Value Streams hold valuable resources with some similarity in function (e.g. organizational effectiveness, improvement, change management, people development and education). There are opportunities to combine these resources to better leverage this work and focus.

**Consolidating Registration**

By consolidating registration resources and establishing a productivity target of 5.75 registrations per hour (current top performing location), the organization could reduce registration FTEs by almost 8. This equates to a gross opportunity of $359K.

Mental Health outpatients was not included in this opportunity.

**Medical Device Reprocessing Staffing**

Qualitative information suggests that there is a 1-2FTE opportunity to reduce MDR staffing during lower volume evening shifts, representing an opportunity of $45K per FTE. The gross opportunity should be further assessed by capturing and analysing volumes and workload by MDR shift.

### Table 10: Registration FTEs

<table>
<thead>
<tr>
<th>Location</th>
<th>FTEs</th>
<th>Volume per hours</th>
<th>FTEs at 5.75 per hour</th>
<th>FTE savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>General ER</td>
<td>6.30</td>
<td>5.72</td>
<td>6.27</td>
<td>0.03</td>
</tr>
<tr>
<td>Urgent Care</td>
<td>4.85</td>
<td>3.13</td>
<td>2.64</td>
<td>2.21</td>
</tr>
<tr>
<td>Diagnostics</td>
<td>8.18</td>
<td>5.74</td>
<td>8.18</td>
<td>0.00</td>
</tr>
<tr>
<td>OP Clinics*</td>
<td>9.92</td>
<td>3.25</td>
<td>5.61</td>
<td>4.31</td>
</tr>
<tr>
<td>Pre-op</td>
<td>1.01</td>
<td>4.02</td>
<td>0.70</td>
<td>0.30</td>
</tr>
<tr>
<td>Oncology</td>
<td>2.02</td>
<td>5.18</td>
<td>1.82</td>
<td>0.20</td>
</tr>
<tr>
<td>Geriatric</td>
<td>0.76</td>
<td>0.01</td>
<td>0.00</td>
<td>0.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33.03</strong></td>
<td><strong>4.39</strong></td>
<td><strong>25.23</strong></td>
<td><strong>7.80</strong></td>
</tr>
</tbody>
</table>
The hospital has spent some time managing administrative expense and FY13/14 results from CIHI indicate BCHS is well below the provincial average on spend in this area.

![Figure 25: Administrative Spend (%) FY13/14](image)
Workforce Optimization

The goal of this work would be to:

► Quantify the demands of the functional area as well as current tasks being performed by available resources.
► Identify core activities needed to be undertaken as well as soft and hard skills needed to perform tasks.
► Define technical competencies, knowledge and experience of available resources.

The goal of this initiative is to identify skill gaps (to be filled by cross-training and/or new hires), revise job roles and descriptions to align with department and organizational strategic agenda (including which activities to start, stop and continue) and align resources to more appropriately fill those roles.

For instance, it has been found that many finance resources were performing many transactional, non-strategic or organizationally value-added activities – such as senior staff performing journal entries and preparing financial reports for other organizations. These resources could be better aligned and focused to fill current gaps, such as budget and forecast specialization.

There are also opportunities within Human Resource where there are some ambiguous job descriptions and responsibilities, such as HR Analysts being seconded as a recruitment specialist, and Team Leader performing tasks typically aligned to compensation analysts.

It is recommended, especially in non-clinical administrative areas, that the organization undertakes a comprehensive skills assessment of its resources to understand skill fit and capacity and demand.
There are many contributing factors impacting staff engagement and satisfaction, which could result in increased sick time and grievance rates. There are known links between staff satisfaction and patient safety (ref: Health Affairs 2011). This is important as empowered staff are more responsive to organizational initiatives to improve patient care. Data was reviewed from two patient safety culture and work-life questionnaires used for Accreditation Canada’s program.

It would be expected that the extent of recent organizational change would have had an impact on staff. However, the concern for BCHS is that overall staff engagement scores and employee response rates have decreased over the past 5 years. This is combined with an increase in total number and percentage of union grievances.

Recent engagement surveys highlighted concerns regarding negative culture and work environment; employees feeling under-valued; low leadership trust scores; and concerns about the quality of care. It is important that the organization recognize these concerns and make a concerted effort to address root causes and put in place targeted strategies to improve this situation.

Figure 26a: Overall Engagement Score and Employee Response Rate (FY11-15 YTD)

Figure 26b: Number of Unionized Employees and Grievance Rates (FY11-15 Forecast)
High Level Recommendations:

- Implement a robust mechanism to manage demand and capacity and have flexible schedules to accommodate.
- Create accountability agreements (e.g. number of allowed shift refusals) for pool resources to manage predictability and availability.
- Set appropriate contract mix targets by unit and set up mechanisms to track and hold units accountable to maintaining those ratios.
- Monitor financial impact for IPC implementation based on unit and acuity for the base staffing model.
- Undertake a comprehensive skills assessment of its resources.
- Determine the base metric for staffing levels – budget, schedule or actual and manage accordingly.
- Determine strategies for successful sick time management and continue to implement.
- Continue strategies to improve staff and physician engagement in light of challenging circumstances.

Benefits include:

- Improved measurement and tracking of overtime and sick time by unit
- Improved management of casual nursing pool
- Movement towards acuity based unit staffing model
- Organizational targets for skill and contract mix by service and unit
- Increased understanding of current staff competencies and future resourcing demands

<table>
<thead>
<tr>
<th>Total Gross Opportunity</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce Optimization</td>
<td>$1.9M</td>
<td>10%</td>
<td>50%</td>
<td>30%</td>
</tr>
</tbody>
</table>
Service Optimization
While BCHS is taking the necessary steps to release immediate funds to meet its financial obligations, it is strongly recommended that longer-term investment and divestment strategies be simultaneously put in place to ensure the sustainability of services at the hospital and in the community.

All investment and divestment decisions should be made based on a set of agreed upon guiding principles and supported by detailed business plans assessing all financial and clinical impacts. It is recommended that these principles include, but are not limited to:

► Neutral or positive patient service, outcome and risk impact
► Service alignment to strategic objectives and core service delivery mandate
► Delivery appropriateness within a hospital setting
► Maximizing community and lower-acuity of care capacity
► Revenue generating capabilities

Over the years, BCHS has created partnership agreements with other local hospitals and community agencies to perform various transactional, back-office financial and HR activities for a fee. Upon review, these fees do not adequately cover the human resource cost of performing the service, as well as the opportunity cost of freeing up capacity to perform more strategic, organizationally aligned activities. Exiting from these relationships could release approximately $45K of financial and HR resource capacity.
BCHS has multiple outsourcing (completely managed by a third-party) and sharesourcing (joint provision of service with a third party) agreements in place, most notably with inpatient food services, medical transcription, print shop, linen and laundry, security and account payable. These relationships have been positive, and it is recommended that continual management and measurement of benefit realization is maintained.

It is recommended that the hospital review, expand and introduce new outsourcing or managed service relationships. This will allow hospital resources to focus on core, more strategically value added activities while maintaining or hopefully decreasing its cost of providing those services. This opportunity cost alone may justify enacting these joint ventures. Areas of opportunities which have been successfully implemented at other organizations for consideration by BCHS may include:

- Transactional Finance and HR functions, including payroll, AR, employee benefit self-service
- Medical device reprocessing
- Biomed
- Non-patient area environmental services

Following established guiding principles as discussed above, business cases should be developed and reviewed prior to implementation.
Service Optimization – Ambulatory Care

Through funding reform and healthcare policies, healthcare decision makers have made it decisively evident that there is a need to deliver improved care, at lower cost, closer to patients’ homes. It is a reality that hospital organizations need to shift their resources to managing the most acute patients, allowing the community to support those more appropriately served in that setting. It has been identified that some services provided at BCHS, specifically select ambulatory care and outpatient activities, may be better served in another setting, either community or primary care, allowing the hospital to care for those most in need of acute services. For example:

- Delivery of well-patient clinics
- Well-patient clinical follow-ups
- Asthma clinics
- Other non-interventional, non-day procedure ambulatory clinics
- Primary care activity

Better understanding ambulatory care utilization may also allow for the rescheduling and consolidating of clinic days, freeing up ambulatory capacity. This capacity could, for example, be used to shift appropriate OR volumes to an ambulatory care setting, having a domino effect by freeing OR capacity to perform potentially more revenue-generating activity and relieving inpatient bed pressures at the benefit of patient care. More work is required to identify the most appropriate activity to shift and its impacts – a target of 10% reduction in ambulatory care and outpatient activity would result in a $1M gross opportunity.
A major opportunity exists in the divestment and sale of the Willett Hospital site. The building, which is chronically under utilized due to the inappropriateness of its physical plant for clinical activity, houses BCHS’s Urgent Care Centre and leased out in part to various third party providers. Maintenance cost is becoming prohibitive, and the expected return on investment to retrofit and renovate the space is unfavourable. Sale of the site, estimated to be finalized within 18 months of a decision to sell, could generate a positive influx of revenue for the upgrading of capital and capacity at the Brantford General site. The immediate benefit would be the decrease in maintenance, plant upkeep and depreciation (~$700K) with the sale proceeds from building and land to be between $5-10M+ pending detailed estimate.

Following the guiding principles, a complete business plan and impact assessment will need to be commissioned, detailing the impact to service, patient access, and to the community of Paris as a whole. Preliminary discussions and analysis show the majority of patients accessing the services are Brantford residents, that renovations to the General site emergency department and innovations to ED care will be able to accommodate the expected increase in visits, and the community has capacity to maintain patient access to care.
Service Optimization – Other Opportunities

BCHS has committed to implementing the national Choosing Wisely strategy with the goal to rationalizing diagnostic ordering practices. The committees formed to monitor and track these improvement initiatives – with preliminary analysis suggesting a 10-25% reduction in diagnostic supply and reagent use would yield $100-300K cost savings – should include input from financial and operational representatives.

**Pharmacy** has developed some strong internal processes however there is further opportunity for automation which will enhance capacity. In addition, there is a significant amount of re-work which is occurring related to documentation which offers a savings opportunity to have this time invested in more value added activities.

Given BCHS has built a strong laboratory service, opportunities exist through the CoLab partnership to expand service and generate revenue specifically relate to pathology and blood services. Opportunities exist to expand the role of BCHS lab services beyond the LHIN in partnership with CoLabs as some lab capacity within the Hamilton area is nearing capacity.

BCHS has a robust Infection Prevention and Control team that can be leveraged beyond providing services to BCHS.

Similarly, it is recommended that strategic investments be considered to maximize capacity and potential revenue for other core, **regional services** such as the regional stroke program. It is also recommended that BCHS create stronger regional partnerships, potentially augmenting its paediatric and regional mental health programs with neighbouring hospitals, such as McMaster and St. Joseph’s Hamilton.

Other opportunities include Home Oxygen which may be delivered by a private organization.
Service Redesign - Recommendations

High Level Recommendations:

► Review and set targets for broader implementation of “Choosing Wisely” activity, including over testing, repeat testing, outdated procedures, and rationalization of low volume testing.
► Develop operational and financial impact assessment and implementation plan for the closure of the Willett hospital.
► Rationalize community partner contracts and relationships, including outsource and sharesource contracts, to determine current and future operational and financial viability and action plan to proceed with those relationships; identify other outsourcing opportunities.
► Identify opportunities to expand selected, strategic regional role, such as regional pathology, to maximize capacity and revenue.
► Define guiding principles for assessing the fit for delivering service at BCHS (e.g. selected ambulatory and outpatient visits), at another hospital or community partner.

Benefits include:

► Revenue generating opportunities
► Allows focus on core services and primary mandate
► Free up capacity – both physical and human resources
► Rationalized community partnerships
► Clear and objective service investment and divestment decision making criteria and processes
► Allows for expansion of selected services to take on a regional leadership role

<table>
<thead>
<tr>
<th>Total Gross Opportunity</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Redesign</td>
<td>$7.2M</td>
<td>10%</td>
<td>25%</td>
<td>50%</td>
</tr>
</tbody>
</table>
Financial Optimization

During the diagnostic, EY identified several opportunities to better align finance and performance management functions to the organization’s vision and strategy to results.

Most importantly, the financial improvement the hospital seeks will not be effective in an organization where there are limited financial and budget controls.

Various financial reports and operational statistics were reviewed, including payroll, financial statements and department budgets and actual volumes and expenditures, and combined with targeted conversations with internal stakeholders grouped opportunities in the following categories:

1. Implementing tactical, quick win opportunities
2. Improving financial governance and accountability
   - Operating within the provincial and local context
   - Standardizing processes
   - Moving to performance based budgeting
3. Improving performance and data quality management

The following recommendations will enable the organization to implement a financial operating model as outlined, to better plan and control for costs, improve accountability and risk, and align effort with strategic objectives.
Financial Controls – Tactical Quick Wins

Gross tactical savings opportunities are valued between $850K - $1.6M.

The organization’s current fiscal position necessitated an immediate but thorough assessment of quick, tactical cash-releasing opportunities. With a commitment to look at non-service reducing initiatives, EY worked with hospital resources to identify the following possible schemes:

► Controlling discretionary spend
► Reviewing indirect tax opportunities
► Rationalizing staff and non-urgent patient travel expenses
► Rationalizing spend on general supplies (e.g. paper and printed forms, postage)
► Reviewing leases, licences and rental income
► Putting a hold on all job vacancies pending review
► Hold on all non-essential training
► Identify and pursue underutilized indirect tax opportunities
► Capture and redistribute chronically underspent budgets

While not exhaustive, the identified list is conservatively valued at up to $1.6M. It is expected that as the organization moves towards implementing the recommendations found in this report that additional projects and more aggressive targets will be identified and validated.
To achieve this high functioning future state, BCHS has to better define and audit its accountability structures across the full spectrum of management responsibilities from strategy to front line. Aligning and enforcing these functions will hold all stakeholders accountable in the financial process, driving compliance and sustainable results.

Figure 27: System and Hospital Accountability Framework

External influences
- LHIN, MoH, Partners
- Mission, Vision, Values
- BCHS Leadership, Culture

Internal Influences
- Strategy
- Strategic Priorities
- Operating Model/Plan

Corporate Accountability
Blend of Program, Service and Individual Accountability and Responsibility

Financial Management (within a Framework)
- Clinical Services Planning and Delivery
- Health System Funding
- Integrated Performance Reporting
- Risk and Quality
- IT and Decision Support
- Sustainable Clear Direction Standardized Integrated
The finance function has four key goals:

1. Implementing controls in relation to the budget
2. Planning and forecasting based on expected activity
3. Monitoring
4. Internal alignment between financial, operational and activity data

This is important to the organization in order to:

► Effectively manage resources overall
► Facilitate local accountability for performance
► Effectively plan for new and emerging pressures
► Be responsive to the evolution of MoH funding and associated expectations

Figure 28: Key Finance Functions
An observation during the diagnostic was that there was discrepancy between budget creation, management and adherence across the various Value Streams and departments of the organization. There were many cost centres which had significant variance to budget – which in and of itself may not be an issue as changes to baseline may be necessary to manage in-year fiscal realities. However, it was apparent that there was not a consistent communication or validation to these changes. An example of this discrepancy is highlighted when analysing actual FTE deployment of nurses on units to what was budgeted and what was scheduled.

Table 11: Actual vs Budget Staff

<table>
<thead>
<tr>
<th>Unit / Service (FY14)</th>
<th>Actual Compared to Schedule</th>
<th>Actual Compared to Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RN</td>
<td>RPN</td>
</tr>
<tr>
<td>Medically Integrated Program</td>
<td>-12.8</td>
<td>8.4</td>
</tr>
<tr>
<td>CCU</td>
<td>-2.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Medical / Cardiac</td>
<td>-2.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>-7.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Surgical</td>
<td>0.4</td>
<td>-2.4</td>
</tr>
<tr>
<td>Integrated Stroke</td>
<td>0.6</td>
<td>-0.3</td>
</tr>
<tr>
<td>General Rehab</td>
<td>0.2</td>
<td>-0.1</td>
</tr>
<tr>
<td>Complex Continuing Care</td>
<td>0.2</td>
<td>-1.0</td>
</tr>
<tr>
<td>Mental Health</td>
<td>-1.4</td>
<td>-0.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>-24.8</td>
<td>7.8</td>
</tr>
</tbody>
</table>

Rigorously controlled and monitored financial functions will provide a necessary mechanism for increased cost control and fiscal accountability.
Confidence in Budget is Essential to Performance

As shown in Table 11 on the previous slide, when compared to what was scheduled on the rotas, there was less nursing FTEs and more RPN and PSWs deployed on the units. However, compared to budgets, there was more of each nursing role deployed.

This swing, if assuming the actual worked hours is an accurate reflection of demand:

► Compared to schedule, the organization would have had a favourable variance of +$3M
► Compared to budget, the organization would have had an unfavourable variance of -$1.5M.

It is suggested that true demand falls in between these extremes. These budget variances were not limited to workforce compensation, but to varying extents for equipment spend, supplies and sundry.

It is strongly suggested that a detailed, focused budgeting exercise be undertaken to allow for accurate forecasts and tracking variance. This exercise would right-size program budgets to actual demands, reallocating resources where needed and potentially releasing capacity for organizational innovation and financial relief. Most importantly, it will provide the necessary budget creation and management training to P&L administrators at BCHS.

.
With the budget in place, centrally administered, thoroughly monitored control and approval processes will flag any significant variances to plan for attention.

Control over spend is greatly enhanced when centralized under one accountability structure and reported centrally. The Finance function could serve to be the central manager for non-unit specific spend, such as:

- Discretionary spend on supplies, minor equipment, licenses and subscriptions etc.
- In collaboration with HR, non-regular HR compensation and benefit monitoring, such as long-term disability and maternity leave.
- Capital equipment, including business case evaluation, buy vs lease analysis, asset tracking and forecasting.
- Cost recovery and reimbursement of physician and private pay arrangements.
- Contract management, minimizing redundancies and maximizing returns.
- Developing standard policies in collaboration with programs for example, lieu time/flex time, budgets for special projects, revenue recognition.

These control processes need to be developed and informed by operational and clinical input, just as clinical controls and rationalizations should be made understanding their financial repercussions.

BCHS has undergone a supply chain exercise for leaning out its OR supply management to great effect and is currently implementing similar initiatives across its inpatient unit, with benefits expected to be measured and realized in this upcoming fiscal year.
How the Hospital Can Build Fiscal Accountability

The hospital operating cycle including strategic planning will drive the yearly operating plans and cascade performance expectations through to the Value Streams.

<table>
<thead>
<tr>
<th>Ministry</th>
<th>Finance Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>► Better achievement of Vision, Goals and Outcomes</td>
<td></td>
</tr>
<tr>
<td>► Greater transparency – accountability</td>
<td></td>
</tr>
<tr>
<td>► Prevents a ‘wish-list’ approach of departments in preparation of budget estimates</td>
<td></td>
</tr>
<tr>
<td>► Informed allocation of available additional resources</td>
<td></td>
</tr>
</tbody>
</table>

Outcomes

<table>
<thead>
<tr>
<th>Strategic Planning</th>
<th>Value Streams</th>
</tr>
</thead>
<tbody>
<tr>
<td>► Links funding to strategic priorities</td>
<td></td>
</tr>
<tr>
<td>► Improved quality of annual plan discussions</td>
<td></td>
</tr>
<tr>
<td>► Better inputs for preparation of plan documents</td>
<td></td>
</tr>
<tr>
<td>► Improved performance management</td>
<td></td>
</tr>
<tr>
<td>► More realistic estimates</td>
<td></td>
</tr>
<tr>
<td>► Informed allocation of available resources</td>
<td></td>
</tr>
<tr>
<td>► More assured fund availability</td>
<td></td>
</tr>
<tr>
<td>► Lesser re-appropriation requirement</td>
<td></td>
</tr>
</tbody>
</table>
Data Quality is a Key Driver to Manage Performance

Although there have been significant investments in data management and reporting such as the BI tool, there remain gaps in useable, reliable data in the organization’s datasets, preventing optimal data-driven decisions around operational and clinical activity. It is crucial that an organization understands the true cost of service as well as how well the services perform against targets. Specific areas of the hospital had limited or non-standard activity data such as outpatient mental health, ambulatory care and organizational development. The diagram below outlines the necessity of good data for operational management and decision making.

We don’t know what we don’t measure
BCHS does not currently have a comprehensive view of the full scope of patient activity and costs of operation, limiting its ability to effectively identify, allocate and monitor resources

Better data leads to better care
If BCHS can measure, track and understand the unique demand pressures, capacity constraints, and bottlenecks to patient flow and access to care, it can effectively and purposefully distribute budgets and resources across the organization

Enabling a high performing system
In the future a data driven performance and data quality management framework can enable increased access, improved quality, and greater patient, physician, and staff satisfaction
Data Quality

There were multiple scenarios which were highlighted during the review that demonstrated the need for increased data quality:

- Mental Health non-inpatient activity is not reliably captured, tracked or coded, making it difficult to assess performance of those services.
- Clinical documentation and coding quality of diagnostic wait-time information prevented accurate assessment and identification of potential patient access bottlenecks.
- Limited financial cost and margin information for surgical and care pathway quality based procedures (QBPs), restricting information necessary for strategic resource allocation and focus.
- Unavailable and/or incomplete ambulatory care clinic utilization and descriptive visit information.
- Capturing accurate workload and utilization data, a current gap, will allow for the identification of streamlining staffing capacity to demand, especially for poorly tracked allied health resources.

In the current fiscal environment, confidence in data quality, documentation and coding of clinical activity is paramount as information on cost and complexity of patient care is increasingly used to allocate funding. EY has had experience with some clients who have invested in dedicated experts who audit patient coded data to have seen as large as a 10x ROI on increased favourable HBAM funding through improving accuracy of patient complexity and acuity. BCHS has increasingly seen variation between hospital expected and CIHI accredited QBP volumes, and has invested in data quality resources. It is recommended documentation and coding appropriateness and accuracy is actively tracked and continuously adjusted.
Financial Controls - Recommendations

High Level Recommendations:
► Builds on current Financial foundations to become a strategic enabler for driving organizational performance excellence through established guiding principles
► Detailed, focused budgeting exercise be undertaken to allow for accurate forecasts and tracking variance.
► Documentation and coding appropriateness and accuracy is actively tracked and continuously adjusted to most accurately reflect cost and complexity of services provided.
► Implement near term, quick win recommendations, with ongoing additional projects and aggressive targets identified and validated
► Discontinue financial and HR activity for external organizations
► Undertakes an organization-wide data management assessment and strategic plan to provide a complete picture of hospital operations to decision makers
► Review ROI on selected tools and automated processes for finance
► Review budget implications for special projects and operational impact

Benefits include:
► Increased control, visibility and accountability for financial and clinical operations
► Consolidated spend for non-service specific expenditures (general minor equipment, HR benefits etc.)
► Realized near term cash releasing activities and longer-term sustainability planned efforts
► Improved data quality and management strategy and plan

<table>
<thead>
<tr>
<th>Estimated Gross Opportunity Realization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Gross Opportunity</strong></td>
</tr>
<tr>
<td>Financial Controls</td>
</tr>
</tbody>
</table>
Section 3
Improvement Program and Organizational Enablers
Improvement Implementation Program
Addressing Current and Future Challenges

- The hospital has experienced significant organizational change in the past 5 years which, although targeted at overall improvements in effectiveness and quality, have had varying success in terms of implementation and realizable benefits.
- Some of these changes have included: organizational structure and new administrative and medical leadership roles; introduction of IPC and new strategic directions.
- Many areas of the organization are reporting significant stress as a result of multiple changes, competing priorities and underlying challenges related to accountability and decision making.
- Now the hospital is facing a significant financial challenge that requires not only a solid understanding of where costs can be better managed, but also a hospital wide commitment to collaboration, action and accountability in terms of improving its financial position.
- To achieve these objectives, the hospital will need to look broadly at a Program of Improvement that is supported by:
  - Strong executive and physician leadership and engagement.
  - Supporting processes and structures.
  - Rigorous plan and action to execute savings results.
Three Key Foundational Elements for Improvement

1. Clarity of Leadership, Decision Making and Accountability.

Clarity of leadership, roles and mandate at the level of Executive, Physician, Value Stream, Program and Services to support effective decision making and engagement to both implement the improvement program, enable effective operating processes, as well as sustain the required change.

This will be achieved through:

► Clarity on how the hospital is organized, structures, role profiles etc., how the hospital controls and manages the business such as governance, performance management etc., as well as roles and functions for key committees and decision making.

► Transparent integration of the Improvement Program activities and directions into hospital “new normal” hospital operations.

► Definition and agreement on key decision points and who needs to be involved in decisions including escalation.

► Aligned Physician structure and support.

► Agreed to decision making criteria for actions such as re-investment at the program and service level requiring organizational priorities and alignment of activities to those priorities.

► Continued strong community engagement, collaboration and new partner and relationship development.
Three Key Foundational Elements for Improvement


- Develop an Operating Model including a financial performance framework that defines how the hospital conducts standard processes, policies.
- Integrated accountability structure for the delivery of improvement activities and holds key individuals to account for the delivery of the agreed plans.
- Effective and accurate management of information in support of delivery and clear reporting to BCHS executives to enable performance to be tracked and performance managed.
- Analytics driven from finance, clinical and activity data, will provide a robust evidence base for ideas and initiatives to deliver required improvements.
A clear operational support structure for BCHS through which targeted change capacity can be deployed to workstreams or specific schemes.

Establish a Project Management Office that is aligned with the Quality and Strategic activities and reporting to support implementation of the operational improvement.

Key roles and structures defined: Steering Committee; BCHS senior leadership responsible for overall performance and strategic alignment; implementation team responsible for managing the day-to-day operations of the Program; Clinical Program workstream/working groups aligned to each of BCHS improvement areas; and a Physician leadership advisory group.

Support resources as required for reporting, planning, analysis and implementation

Regular reporting on progress and any variance via the benefits tracker
Leadership, Decision Making and Clarity of Accountability
The hospital’s structure evolved to meet desired changes in autonomy and introduction of Value Streams. There remains some misalignment of roles, flow and resources. The goal is to have deliberately designed elements of the hospital that align and reinforce each other to deliver the organization’s strategy and operating plan.

It is recommended that BCHS:
1. Refine the current organization structure to better reflect patient flow and associated activity.
2. Create more clarity on the Value Stream roles and associated leadership and accountability.
3. Develop a Physician Organization structure and associated remuneration that aligns to the broader BCHS structure, activity and expectations.
Opportunities to Enhance the Current Organization Structure

Opportunities exist to:

► **Improve operational performance** through standardizing leading practices and processes (e.g. discharge planning, admission processes).

► **Reduce duplication** and increase in consistent, replicable work, consistent spans of control.

► **Align of similar patient services** facilitating flow and care pathways.

► **Increase robustness and consistent delivery of care** while reducing the risk of errors, rework and varying quality.

► **Enhance control and oversight** over the hospital “business”.

► **Improve quality, standardize and timeliness of data** and performance reporting.

► **Define accountabilities** aligned to responsibilities.

► **Facilitate consistent culture / service levels** across the hospital.

A refined organization and physician structure can help achieve the following:

► **Strengthens ability to meet performance expectations** and new work requirements.

► **Supports Definition of Work** as flow and processes shift.

► **Facilitates a culture change about “how work gets done in the hospital”** and how people interact with one another.

► **Enables Staffing/Resource Changes** as people need to work differently and manage new expectations.

► **Creates an Organization Design that is Optimized** reflecting clinical pathways and program integration.
# Guiding Principles for the Hospital and Physician Organization

## Patient Focus
- Understand and anticipate the needs of Patients, Families, Staff, Physicians
- Have an appreciation for what is valued in the eyes of the end-user
- Seek continuously formal and informal feedback and adjust to address gaps and generate opportunities to create exceptional value

## High Performance Organization
- Hold accountable to internal and external performance benchmark standards
- Provide feedback and evaluation on a continuous basis to improve performance of the individual, group, process and technology

## Clarity of Accountability and Responsibility
- Define and communicate roles and responsibilities such that expectations are set, accountability is achieved and two-way communication (feedback) is encouraged
- Eliminate redundancy to the extent possible

## Enabler of People Development
- Provide opportunities for employees to achieve full potential
- Enable growth, retention and recruitment
- Facilitate movement across the organization.
- Align with rewards, recognition and promotions with performance and capabilities

## Integrated Teaming and Communication
- Visibility of the right information to the right people at the right time
- Break down silos
- Encourage cross-functional teaming that is patient-centered

## Alignment of Hospital and Physician Goals
- Alignment of incentives
- Mutual understanding of clinical integration
- Monitor significant trends through targeted reporting
- Alignment with MEDCAN

## Supports a High Performance Organization
- Written agreement on roles and expectations
- Supports quality peer review and credentialing that lies in mutual accountability of the physicians
- Performance assessment program

## Supports a High Performance Organization
- Define and communicate roles and responsibilities
- Elminate duplication of role and function to the extent possible
- Supports physician driven governance
- Align competencies to needs

## Enabler of Physician Leadership
- Growth, retention and recruitment planning - training and education
- Effective physician workforce planning
- Strong clinical and administrative physician leadership

## Integrated Teaming and Communication
- Clinical and administrative co-management
- Right information Break down silos
- Encourage cross-functional teaming that is patient centered
Sustainable Operating Model and Fiscal Accountability
The Hospital Requires an Enhanced Operating Model That Drives Transparent Program and Service Performance, Fiscal Management and Decision Making

It is recommended that BCHS:
1. Develop and implement a standard operating model that specifically aligns the roles and responsibilities for all members of the hospital with fiscal accountability.
2. Define and implement a comprehensive performance management and performance improvement framework and plan.

Defines the conceptual model and high level governance and functional ownership of the capabilities, accountabilities / responsibilities, within each of the Value Streams and services across the organization.

Details how the processes work, defines the desired service levels, and identifies key performance indicators.

Defines the strategy, vision and guiding principles. It guides the entire operating model.

Defines the scope of capabilities that the operating model addresses, and may include activities not currently performed. Includes the focus and scope of the Value Streams. Defines clinical and support services focus.

Defines the organizational structure, teams and resourcing levels required to achieve the desired utilization and budget results.

Defines the technology to support business processes. Also details standards around data and information management and feeds organizational requirements.
Why Is a Strong Operating Model Important?

What pressures will the hospital continue to face?

► An overall squeeze on the resourcing envelope and less guaranteed funding
► A shift from base and more “at risk” funding
► A tremendous focus on data, standards and ensuring accurate capture of services provided; increased accountability and reporting
► Longer term cycles of funding (HBAM): Changes in service delivery today will be reflected in funding results two years from now
► Dollars follow the patient, so the delivery model and efficiency have increased impact
► Relative performance matters: Even if you are improving, you must improve as fast or faster than your peers since the funding pot is fixed
► Higher expectations from patients and families
► More focus on LHIN wide collaboration and partnerships

A Strong Operating Model Positions the Hospital for Pro-active Cost Management

► Cost, quality, and access challenges will continue to spur health care reform initiatives
► Incidence of chronic disease will explode, requiring behavioral as well as funding model solutions
► More emphasis on community partnership and community integration – both vertically and horizontally
► Decision making reliance on data and information
► Manage demand; wait times etc.
► Human Resources including Physician Resources are the engine of the system and key to achieving operational objectives
► Managing with patient centred Standard Care Pathways

Dollars follow the patient, so the delivery model and efficiency have increased impact.

Relative performance matters: Even if you are improving, you must improve as fast or faster than your peers since the funding pot is fixed.

Higher expectations from patients and families.

More focus on LHIN wide collaboration and partnerships.

Cost, quality, and access challenges will continue to spur health care reform initiatives.

Incidence of chronic disease will explode, requiring behavioral as well as funding model solutions.

Decision making reliance on data and information.

Manage demand; wait times etc.

Human Resources including Physician Resources are the engine of the system and key to achieving operational objectives.

Managing with patient centred Standard Care Pathways.
Community Partnerships
The Province and LHIN Have Set Growing Expectations for Partnerships and Integration

Through provincial initiatives such as Patients First Action Plan (2105) with expectations related to improving access, connecting services to deliver better coordinated and integrated care in the community closer to home, Health Links and making evidence based decisions on value and quality to sustain the system, the role of the hospital as facilitator and leader in these efforts is growing.

The February 2016 OHA Submission on Patients First speaks to the future expectations for hospitals related to:

- More effective integration of services through expanded models of care such as Health Hubs
- Emerging new funding models such as Bundled Care
- Support for new Sub Regions
- Engaging physicians to build hospital and community connections
- Close collaboration to strengthen home and community care

BCHS will have increasing opportunity to look at a number of new and enhanced partnerships related to local services in Paris given expected changes to the Willet, broad outsourcing and share sourcing opportunities and expanding the CoLabs relationship for additional revenue.

It is recommended that BCHS continue to take on a local leadership role in facilitating integration and partnerships with both public and private sector providers.
Effective Improvement Program Management Structure and Teams
BCHS Will Need to Build an Improvement Program to Organize and Deliver Operational Improvement

It is recommended that BCHS establish a Program Management Office (PMO) to manage and monitor operational improvement projects and associated budget changes. The PMO needs to be an integrated function that combines other improvement activities. The PMO will need to identify and the appropriate structure, skills, measure-able, understood and relevant goals and targets, accountable teams and effective project management rigour.

Leadership and processes to enable BCHS to make investments to reach desired results

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Sustainable Performance Improvement

- **Formulate** clear, coherent imperative, strategy, operating model, accountability and business objectives: Visible and consistent leadership. Initiate operating model and clinical services planning.
- **Ensure Value Stream Leaders and Managers can measure and take action based on results**: performance against target and understand the cycle of required change.
- **Integrate Financial Stewardship** across programs, with standard approaches and measures and right level of support. Initiate 3 year rolling financial planning.
- **Support skills and capacity** for clinical leaders to shape and determine improvement opportunities with measureable outcomes.
- **Supporting Infrastructure** to enable, integrate and align core functions related to HR, communication, finance, IT.
- **Governance structure** to facilitate integration, monitor and report on progress across the organization.
Research on organizations who successfully deliver sustainable cost savings, indicates a strong correlation between key behavioural elements and the scale of savings delivered.

- Involvement and buy-in from the whole organization, led by the Board, engaging physicians and building on work already underway
- Strong governance arrangements, clear lines of accountability and clinical leadership
- Robust tracking of in-year benefits with the ability to course correct as required
- The right organizational culture that focuses on robust decision making, performance improvement and the will to see things through.
- A clear organizational purpose and vision to making the required savings
- A broad evidenced based program of savings with clear success measures that are largely driven by service improvement

“Delivering sustainable cost improvement programs” Audit Commission, Monitor (2012)
The key functions of a Program Management Office are to:

- Oversee the governance for Improvement Projects and hold Work stream leads to account for the delivery of their individual Work streams.
- Provide assurance to a Steering Committee/Executive Committee on the delivery of Improvement Projects.
- Escalate, as required, to the Steering Committee/Executive Committee any cost improvement issues for decision, discussion, assurance, or endorsement.
- Tracks improvement Projects across BCHS in conjunction with the business/finance managers and through the benefits tracker.
- Track the realization of benefits from projects across Work streams using agreed upon quality and performance indicators and report to Steering Committee.
- Monitor the delivery and impact of projects against the overall program.
- Ensure work stream plans are aligned with the wider Improvement Program.
- Provide a forum of support for the work streams in delivering their Improvement Projects through standardized reporting and tools.
- Enable escalation of concerns, joint resolution of problems and cross-fertilization of ideas.
- Oversee Change Management and Communications for the PMO
The Following Processes Will Support Delivery of Savings for the Improvement Program

1. **Improvement Program Monitoring and Reporting**
   - Establish PMO Processes and Reporting
   - Secure executive clinical buy in. Establish a Steering Committee, Physician Leadership Team and Project Implementation Teams/Working Groups
   - Assign BCHS project owners who will be responsible for signing off on the detailed project plan and impact assessment.
   - Identify distinct delivery support, challenge and monitoring functions. Establish a BCHS resource team to support each project.
   - Define all roles and responsibilities, decision making framework and dispute resolution for all committee/working group members.

2. **Program Monitoring and Reporting**
   - Establish structure for engaging key clinical and non-clinical staff. Communication and engagement plan to directly inform, challenge and validate implementation projects.
   - Formalize savings reporting. The PMO to manage benefits tracking for each project. Project owners will be responsible for regularly reporting savings to the PMO.
   - Create detailed project plans for each project and opportunity with milestones, activities, allocation and expected outcomes
   - Undertake transparent reporting. Report savings, progress against plan, implementation barriers and any changes to project plans through the PMO and Steering Committee.
   - Establish clear and robust KPIs. Designed for each project to assist the working groups and to measure and track
   - Embed Operational Review results into clinical operations and Monitor local impacts and mitigation with Working Groups, create feedback mechanisms

3. **Project & Opportunity Delivery**
   - Maintain clinical quality and safety. Conduct a quality impact assessment with the BCHS project owner to ensure the proposed cost reduction will not impact quality and safety.
   - Identify linkages and alignment to other projects and initiatives to maximize leverage and standardization.
   - Complete clinical sign off for each project. Ensure input from the designated clinical leads prior to moving forward with implementation.
   - Evaluate documentation and policy requirements required to embed change into practice.

4. **Evaluation**
   - Report progress. Engage the Steering Committee and BCHS communications staff to define key messages for overall Program.
   - Define simple and clear actions. Ensure project outcomes are clearly articulated.
   - Acknowledge successes. Communications staff to ensure successes from project implementations are celebrated and shared across BCHS.
   - Document Lessons Learned
Organizing to Deliver – Target Structure

Board of Directors
BCHS

Challenge

BCHS Leadership Team
Chair: TBD

Challenge

Monitor

Physician Advisory
Chair: TBD

PMO
Lead: Matt Speak
Relevant VS Leads, Project Support Team

Deliver

Challenge

Programs held to account through integrated hospital performance management (financial and utilization)

Challenge

Hospital Performance Management

Monitor

Improvement Projects imbedded into financial reporting

Role - Deliver

Work stream #1
Financial Controls
Executive Sponsor Supporting Team

Work stream #2
Beds
Executive Sponsor Supporting Team

Work stream #3
Workforce
Executive Sponsor Supporting Team

Work stream #4
Programs and Services
Executive Sponsor Supporting Team

Monitor

Improvement Projects Tracking and Reporting
## Project Prioritization

### Table 12: Project Prioritization Framework

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organizational value</strong></td>
<td></td>
</tr>
<tr>
<td>Alignment to priorities</td>
<td>How does the proposed change align to BCHS priorities and/or add patient and community value, and/or how does it align with current initiatives.</td>
</tr>
<tr>
<td>Operational value</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The extent to which the proposed change improves:</td>
</tr>
<tr>
<td></td>
<td>► Current financial position</td>
</tr>
<tr>
<td></td>
<td>► LHIN and MoH priorities and expectations</td>
</tr>
<tr>
<td></td>
<td>► Physician and supporting resource planning and forecasting</td>
</tr>
<tr>
<td><strong>Ease of implementation</strong></td>
<td></td>
</tr>
<tr>
<td>Resourcing</td>
<td>How easily resources can be mobilized and accessed for the duration of the change, as per time (duration), number and types of resources/stakeholders, skill requirements and total FTEs.</td>
</tr>
<tr>
<td>Risk mitigation and feasibility</td>
<td>Readiness and ease of change to operational and clinical people, processes and technology, complexity, probability of success and synergies with other projects.</td>
</tr>
</tbody>
</table>

* Ranking of HIGH, MEDIUM or LOW represents to what extent an initiative meets the criteria

Re-evaluate on a regular basis to ensure assumptions made during initial evaluation remain constant (organizational priorities, availability of resources, operating environment etc.).
Highest prioritized projects would have high organizational value and be relatively simple to implementation (top right of the matrix), with the lowest prioritized projects having both low value and being relatively difficult to implement (bottom left corner).

<table>
<thead>
<tr>
<th>EASE OF IMPLEMENTATION</th>
<th>ORGANIZATIONAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Prepare</td>
</tr>
<tr>
<td></td>
<td>Act</td>
</tr>
<tr>
<td>High</td>
<td>Monitor</td>
</tr>
<tr>
<td></td>
<td>Pursue</td>
</tr>
</tbody>
</table>

**Prepare**
- Seek to decrease complexity and barriers: De-couple into smaller, more manageable initiatives, Engage stakeholders in design Standardize processes and systems

**Act**
- Focus implementation efforts to maximize return: Benefits that arise from these projects could be used to offset costs of others

**Monitor**
- Acknowledge and seek to drive value through other means: Current environment does not support these projects however this may change in the future Focus on internal process/quality improvements

**Pursue**
- Seek to increase value: Combine or bundle with higher-priority initiatives Do where capacity exists

Prioritization Enables Planning for Implementation to Optimize the Use of BCHS Resources for Maximum Value
A preliminary prioritization of BCHS opportunities has been developed and presented below.

Opportunities:
1. Beds
2. Workforce
3. Surgical Program
4. Service Redesign
5. Organizational Enablers
6. Financial Controls
Improvement Program - Recommendations

High Level Recommendations:
► Current organization structure be refined to better reflect patient flow and associated activity.
► Create more clarity on the Value Stream roles and associated leadership and accountability be created.
► Physician organization structure and associated remuneration be refined so there is better alignment with the broader BCHS structure, activity and expectations.
► Define and implement a comprehensive performance management and performance improvement framework and plan.
► Establish a Program Management Office (PMO), with appropriate structure, skills and accountable teams to manage and monitor operational improvement projects and associated budget changes. The ongoing role of a PMO beyond the implementation of the review recommendations should be regularly evaluated against organizational priorities.
► While BCHS is taking the necessary steps to release immediate funds to meet its financial obligations, it is strongly recommended that longer-term investment and divestment strategies be simultaneously put in place to ensure the sustainability of services at the hospital and in the community.

Benefits include:
► Rationalized physician organizational structures and reimbursement mechanisms
► Right-sized and strategically aligned organizational structures and operating model
► Purpose-led, appropriately skilled and resourced PMO function to lead current and future improvement initiatives

<table>
<thead>
<tr>
<th></th>
<th>Total Gross opportunity</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Enablers</td>
<td>$0.3</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
<td>25%</td>
</tr>
</tbody>
</table>
Implementation Risks
Implementation Risks

There are many underlying risks and assumptions in the program of improvement, many of which have hospital wide impacts. Managing these risks is crucial to sustain momentum and meet the timelines as established in the improvement roadmap. A key component of the deployment plan is the development of a structured approach to identify and manage risk. Below are preliminary identified risks, their potential impact to delivery and associated mitigation activities.

<table>
<thead>
<tr>
<th>Risk</th>
<th>Impact</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of consistent and visible executive and Board engagement to support change and make required decisions</td>
<td>H</td>
<td>Facilitation of frequent, focused and relentless messaging from senior executives on the importance of the transformation work and performance expectations</td>
</tr>
<tr>
<td>Limited engagement and buy-in of all relevant stakeholders/clinicians (workstream leadership, physician, and nursing staff) will reduce ability to change operations and/or clinical practices and realize full benefits</td>
<td>H</td>
<td>Targeted and focused engagement of leadership and clinicians in the identification, planning and execution of clinical change opportunities</td>
</tr>
<tr>
<td>Timely access to appropriate BCHS support resources and relevant information</td>
<td>H</td>
<td>Identification and formalizing resource and time commitment at the commencement of the project</td>
</tr>
<tr>
<td>Sub-optimal access to real-time benefits tracking mechanisms limiting timely demonstration of financial and operational benefits</td>
<td>M</td>
<td>Identifying, augmenting and/or creating information capture and benefit tracking and reporting mechanisms at the outset of the project</td>
</tr>
<tr>
<td>Limitations of negotiated agreements resulting in delayed benefits realization</td>
<td>L</td>
<td>Uncovering, quantifying and articulating savings timelines as soon the data is available</td>
</tr>
<tr>
<td>Master Plan and Redevelopment</td>
<td>M</td>
<td>Aligning project plans to integrated redevelopment plans to make sure activities are complementary</td>
</tr>
<tr>
<td>Uncertain level of data quality and validity to support deeper analysis where necessary</td>
<td>M</td>
<td>Identification of gaps in data and creation of tools or workflow improvements to allow for the most accurate baselining and benefits tracking</td>
</tr>
<tr>
<td>Compromising service delivery if current state processes are not effectively redesigned</td>
<td>L</td>
<td>Creating ‘fit for function’ workflows for future</td>
</tr>
</tbody>
</table>

H = High Impact: if risk materializes, there will be a high impact on implementation if not mitigated  
M = Medium Impact: if risk materializes, there will be a moderate impact on implementation if not mitigated  
L = Low impact: if risk materializes, there will be a slight impact on implementation if not mitigated
Section 4

Implementation
Charters and 3-Month Plans
# Beds & Patient Flow

## Objectives
- To identify, develop and deliver operational, financial and clinical improvement initiatives for this fiscal year and subsequent years where relevant to optimize the utilization of inpatient resources
- To review the most appropriate use of all beds within the organization and seek improvements where there are misalignments
- Maintain alignment with the functional requirements of clinical programs and the organizational objective to use resources wisely while maintaining quality of care
- Review benefits of Alternate Care Providers

## Deliverables
- Aligned action plan to take forward bed and patient flow optimization initiatives including those currently underway and to be designed further.
- Refined and standardized select clinical pathways
- Clinical and operational performance indicators to measure and monitor success
- Criteria-led admission and discharge policy
- Business case for alternative models of care for ED patient management
- Review implementation of hospitalist geo-rounding
- Define key physician roles

## Key Activities

<table>
<thead>
<tr>
<th>Projects</th>
<th>Key Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce delayed discharges</td>
<td>- Establish standard care pathways and discharge planning for appropriate procedures, including documented and communicated estimated day of discharge</td>
</tr>
<tr>
<td>($4.3M)</td>
<td>- Develop and implement criteria-led admission/ discharge policy</td>
</tr>
<tr>
<td></td>
<td>- Leverage clinical criteria to increase bed day opportunities across hospital</td>
</tr>
<tr>
<td></td>
<td>- Define model of care for weekend care and discharges</td>
</tr>
<tr>
<td></td>
<td>- Reduce patient transfers and off-service admissions through improved bed management practices to maximize care delivered in the most appropriate setting</td>
</tr>
<tr>
<td>Reduce ALC days</td>
<td>- Establish business case, appropriate patient cohort(s) and associated care model(s) for sub-acute, transitional and/or ALC patients</td>
</tr>
<tr>
<td>($6.9M)</td>
<td>- Align enabling activities with existing improvement initiatives to reduce LOS and ALC</td>
</tr>
<tr>
<td></td>
<td>- Review the application process for ALC patients discharged to another facility</td>
</tr>
<tr>
<td></td>
<td>- Develop engagement and implementation plan with community partners to define service delivery options for selected ALC types</td>
</tr>
<tr>
<td></td>
<td>- Identify other ALC reduction strategies</td>
</tr>
<tr>
<td>Manage ED volume and flow</td>
<td>- Review guidelines and reduce inappropriate ED admissions</td>
</tr>
<tr>
<td></td>
<td>- Review options for better diversion and streaming of patients (e.g. treat-and-release “Hot clinics” for appropriate CTAS 4-5 patients)</td>
</tr>
</tbody>
</table>

## Benefits
This program of work is designed to allow BCHS to:
- Ensure beds are being utilized to the maximum safe levels, and for the most appropriate patients cohorts
- Enable the closer delivery of a target bed occupancy and patient LOS
- Allow expected cost savings and/or revenue (HBAM) benefit to be realized through the optimization of bed capacity across programs
- Allow ongoing mechanism to regularly review and discuss performance and seek improvements where required to maintain optimization

## Financial Impact

<table>
<thead>
<tr>
<th>Gross saving opportunity</th>
<th>$11.2M</th>
</tr>
</thead>
<tbody>
<tr>
<td>15/16 (Year 1) target gross savings</td>
<td>30%</td>
</tr>
</tbody>
</table>

## Resourcing
- TBD

## Program Scope
The following deliverables will be achieved through the implementation of beds and patient flow initiatives:

### In scope
Medical and surgical activity across all funded acute inpatient and rehab/CCC beds

### Interdependencies
- Perioperative Services
- Clinical and non-clinical supports
- Workforce
Three Month Workplan – Beds & Patient Flow

**Detailed implementation design**

**Key Activities:**
- Under PMO leadership, design composition and governance structure of Beds & Patient Flow Implementation working group

**Execution**

- Engage appropriate clinical and non-clinical programs regarding the implementation program
- Rapid assessment of existing, relevant projects
- Confirm project-based metrics

**Savings realization**

**Outputs:**
1. Individual detailed project plans and mandates
2. Finalized project logistics (i.e. team, ToR, KPIs)

**Project 0: Design and Mobilization**

**Expected Outcome:**
Establish and track appropriate organizational target %ALC; establish a ‘close bed behind’ discharge policy

**Project 1: Reduce delayed discharges**

**Key Activities:**
- Identify and validate top procedures (extent of variation, volume) to:
  - Review and develop standard care pathway design to establish expected LOS and appropriate procedures
  - Develop and implement criteria-led admission and discharge policies

**Outputs:**
1. Standardized clinical pathways for top procedures
2. Finalized performance framework for auditing pathway adherence
3. Completion of (1) procedure audit against framework
4. Prioritization and rollout plan for other key procedures and units

**Expected Outcomes:** savings from identification of and action on drivers of case cost variation (i.e. supplies, overtime spend)

**Project 2: Manage and reduce ALC days**

**Key Activities:**
- Review early identification, ALC designation and discharge planning processes
- Conduct review and implementation plan to cohort and appropriately staff ALC unit(s) for those awaiting placement

**Outputs:**
1. Earlier identification and discharge planning for ALC patients
2. Appropriate staffing plan and allocation to manage ALC populations
3. Bed reduction plan

**Expected Outcome:** reduced bed base

**Project 3: Manage ED volume and flow**

**Key Activities:**
- Review guidelines for ED admission and set clinically appropriate targets by patient group
- Build business case for ED diversion and volume management schemes (e.g. ED housed Hot Clinics for treat and release patients)

**Outputs:**
1. Established ED admission criteria
2. Demand-driven staffing plan
3. Business case for ED diversion and volume management programs

**Expected Outcome:** reduction in ED LOS and admissions

**Stakeholder Involvement (relevant clinical and non-clinical programs and services)**
OR Services

Objectives
► To increase perioperative capacity by:
  ► Optimizing predictability and scheduling of blocks and case length,
  ► Maximizing use of OR resources,
  ► Removing variation across the perioperative value stream,
► To increase profitability and reduce costs by:
  ► Align and revise OR capacity to funded activity
  ► Maximize QBP and priority funded revenue (especially those with high margin)
  ► Decreasing need for pre- and post-surgical care (e.g. identifying appropriate inpatient cases to shift to day surgery setting)

Deliverables
► Agreement and implementation on standard organizational policy for case and block booking, scheduling and cancellations
► Agreed and implemented performance documentation and reporting practices (reports by service/provider)
► Deployment plan for efficiency optimization schemes for high-margin and high strategic value procedures
► Optimized OR block schedules and allocations

Key Activities

<table>
<thead>
<tr>
<th>CIPs</th>
<th>Key Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Booking and scheduling</strong> ($270K)</td>
<td>► Apply refreshed standard booking and cancellation policies to enable reduction of disruption and increase utilization of resources</td>
</tr>
<tr>
<td></td>
<td>► Review potential opportunities for block realignment based on standard case lengths and turnarounds</td>
</tr>
<tr>
<td></td>
<td>► Review and refresh pre-op clinic criteria, policies and procedures for appropriateness</td>
</tr>
<tr>
<td></td>
<td>► Implement measures for greater predictability of case length and block scheduling, start times and turn around.</td>
</tr>
<tr>
<td><strong>Maximize resource utilization and OR flow</strong> ($175K)</td>
<td>► Develop scenarios and implement block optimization/capacity and demand review to maximize use of periop resources</td>
</tr>
<tr>
<td></td>
<td>► (QBP) Change case mix of surgical procedures to maximize contribution of cases (core/non-core review)</td>
</tr>
<tr>
<td></td>
<td>► Implement opportunities for enhance pre- and post-surgical flow</td>
</tr>
</tbody>
</table>

Benefits
This program of work is designed to allow BCHS to:
► Maximize utilization of OR resources
► Maximize revenue through additional surgical procedures
► Realign current interventional capacity; with the potential to reduce cost or reinvest.
► Regularly review and discuss performance and seek improvements where required to maintain optimization.

Financial Impact

<table>
<thead>
<tr>
<th>Gross saving opportunity ($000)</th>
<th>$0.65</th>
</tr>
</thead>
<tbody>
<tr>
<td>15/16 (Year 1) target gross savings</td>
<td>25%</td>
</tr>
</tbody>
</table>

Resourcing
► TBD

Program Scope
In scope
All perioperative activities and specialties within BCHS ORs (including elective and urgent activities)

Interdependencies
► Beds and patient flow
► Financial and clinical controls
Three Month Workplan – OR Services

<table>
<thead>
<tr>
<th>Detailed implementation design</th>
<th>Execution</th>
<th>Savings realization</th>
</tr>
</thead>
</table>

**Project 0: Design and Mobilization**

**Key Activities:**
- Under PMO leadership, design composition and governance structure of Perioperative working group
- Engage appropriate clinical and non-clinical programs regarding the implementation program
- Rapid assessment of existing, relevant projects
- Confirm project-based metrics

**Outputs:**
1. Individual detailed project plans and mandates
2. Finalized project logistics (i.e. team, ToR, KPIs)

**Project 1: Optimizing booking and scheduling**

**Key Activities:**
- Review and refresh policies and procedures for case booking, cancellation and case complexity categorization
- Explore options to better track and account for case delays into and out of the OR
- Explore and implement options for improved predictive scheduling of cases and blocks (e.g. codes for complexity)

**Outputs:**
1. Standard organizational cancellation policy for cases and blocks
2. Agreed changes to start time and finish time practices.
3. Reduction in unnecessary pre-op clinic visits
4. Expected Outcomes: improved predictability, planning and management of pre-op clinic and OR blocks

**Project 2: Maximizing resource utilization and OR flow**

**Key Activities:**
- Agreement on sequence of performance improvements (e.g. optimization of OR block allocation)
- Full QBP/Priority funded procedure review to determine margin contribution – prioritize high margin procedures for implementation of efficiency optimization schemes
- Optimize OR blocks driven by implementing best practices and eliminating variation
- Agree productivity improvement targets
- Compare current to expected IP vs Day case procedure rates and implement conversion schemes

**Outputs:**
1. Implementation plan for surgical QBP improvement
2. Increased utilization of OR blocks
3. IP to Day case conversion plan
4. Performance metrics by room/service/physician
5. Improved operational and clinical performance

Expected Outcome: improved in-room and OR resource utilization

**Stakeholder Involvement (relevant clinical and non-clinical programs and services)**
**Workforce Optimization**

**Objectives**
- To review and realign clinical and non-clinical workforce based on agreed measures of demand in order to ensure the most cost effective team is established to deliver high quality care.
- To increase the flexibility of workforce in being able to shift up or down based on demand in the most cost effective manner.
- To improve sick time management across the organization.
- To maximize the potential and skill of all staff, to ensure the organization leverages relevant roles fully.
- To establish or improve the relevant controls related to variable staffing spend across the organization.

**Deliverables**
- Re-establish the potential for a skill mixed workforce to effectively manage ratios and FTE requirements on a per unit basis.
- Implement monitoring and staffing processes to improve workforce flexibility based on surges in demand or other quality based indicators.
- Review other health professional and support workforce variances and implement schemes to reduce variation and optimize patient care.
- Future state roles and staff functions.

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>Benefits</th>
</tr>
</thead>
</table>
| Managing overtime and sick time ($1.4M) | This program of work is designed to allow BCHS to:
- Appropriately skilled and strategically aligned workforce
- Additional oversight and control over major variable labour spend categories (overtime and sick time).
- Inpatient units are flexibly and appropriately staffed with the right mix and number of FTE’s based on demand. |

<table>
<thead>
<tr>
<th>Financial Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross saving opportunity ($000)</td>
</tr>
<tr>
<td>15/16 (Year 1) target gross savings</td>
</tr>
</tbody>
</table>

**Resourcing**
- TBD

**Program Scope**
- In scope
  - All staffing groups within the organization.

**Interdependencies**
- Beds and patient flow
- Financial and clinical controls

**Key Activities**

<table>
<thead>
<tr>
<th>CIPs</th>
<th>Key Tasks</th>
</tr>
</thead>
</table>
| Managing overtime and sick time | - Efficient utilization of PT/PT to reduce costs
- Limiting OT for other non-clinical staff (including lieu time)
- Identify drivers and mitigation plans in areas (e.g. specific service or job type) of concern
- Put in place initiatives to minimize sick time
- Agree on units and programs that will be held accountable to maintaining a 70/30 FT/PT workforce mix across nursing groups; establish corporate controls and escalation processes to monitor and manage |

| Staffing optimization ($500K) | |
Three Month Workplan – Workforce Optimization

### Detailed implementation design

**Project 0: Design and Mobilization**

**Key Activities:**
- Under PMO leadership, design composition and governance structure of Workforce Implementation working group

**Outputs:**
- Engage appropriate clinical and non-clinical programs regarding the implementation program
- Rapid assessment of existing, relevant projects
- Confirm project-based metrics

**Stakeholder Involvement (relevant clinical and non-clinical programs and services)**

---

### Execution

**Project 1: Manage and reduce overtime and sick time**

**Key Activities:**
- Implement monitoring and staffing processes to improve workforce flexibility based on surges in demand or other quality based indicators
- Establish %OT target and monitor compliance
- Optimize the central resource pool capacity and Implement casual pool roster accountability agreements
- Deploy unit-targeted initiatives to identify drivers and reduce sick time
- Agree on units and programs that will be held accountable to maintaining a 70/30 FT/PT workforce mix across nursing groups

**Outputs:**
- %OT and %sick time targets and governance mechanisms
- Optimized central resource capacity
- Increased flexibility due to optimized FT:PT mix

**Expected Outcomes:**
- Flexible staffing model with embedded overtime and sick time controls

---

### Savings realization

**Project 2: Optimize staffing levels, roles and responsibilities**

**Key Activities:**
- Establish target for skill mix (IPC) and determine a unit based acuity model to effectively determine ratios and FTE requirements on a per unit basis
- Review other health professional and support workforce variances and implement schemes to reduce variation and optimize patient care
- Rationalize and consolidate shared resource functions where appropriate (e.g. registration, MDR)
- Conduct skill assessment for support services, including Finance and HR

**Outputs:**
- Acuity based staffing models
- Right-sized shared resource functions
- Skill assessment and gap analysis

**Expected Outcome:**
- Workforce optimization plan which aligns demand, capacity and strategic objectives

---
**Financial Controls**

**Objectives**
- To improve performance and decision making by establishing clear processes and controls for financial and clinical protocols for approving and auditing spend
- To embed a Choosing Wisely culture of sustainability for clinical resource utilization across the organization
- To instill robust performance and data quality management practices and procedures to allow for effective and accurate tracking and monitoring of resource demand and capacity
- To capture revenue and cost saving quick wins to manage near-term financial pressures

**Deliverables**
- Financial performance and data quality management policies and procedures, including KPIs, governance and accountability structures
- Revised, data-informed financial and clinical planning, budgeting, forecasting and reporting practices and structures
- Master capital program, including master plan, purchasing, asset tracking and replacement planning
- Realized quick win opportunities

**Key Activities**

<table>
<thead>
<tr>
<th>Key Activities</th>
<th>CIPs</th>
<th>Key Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance and accountability (Enabler)</td>
<td>Implement mechanisms to centrally manage and account for organization-wide, non-unit specific spend, including: discretionary spend, capital, HR benefits, procurement and capital</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review capital plan, including alignment with master planning process, clinical need, replacement forecasting, and purchase vs lease decisions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop and enforce cost recovery practices, including physician reimbursement and private pay activity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revise budget creation, approval and control processes to appropriate track variance and signal areas of focus</td>
<td></td>
</tr>
</tbody>
</table>

| Data quality and performance management ($500K) | Develop performance and data quality management practices, including capture / input, storage and analysis |                                                                                  |
|                                               | Review data coding practices to ensure accurate capture of HBAM-informing patient activity |                                                                                  |
|                                               | Review and set targets for "Choosing Wisely" activity, including over testing, repeat testing, outdated procedures, and rationalization of low volume testing |                                                                                  |

| Tactical opportunities ($1.5M) | Implement, quick win, near-term opportunities, uncovering indirect tax opportunities |                                                                                  |

**Benefits**
Through this program of work BCHS will be able to:
- Set clinically-informed, appropriate targets for minimizing the need for patients to undergo unnecessary testing
- Increase visibility and strategic control on organizational spend
- Increase data quality and reliability for improved decision making and maximizing favourable HBAM outcomes
- Alleviate short-term financial pressures and install mechanism for long-term financial sustainability

**Financial Impact**

<table>
<thead>
<tr>
<th>Gross saving opportunity ($000)</th>
<th>$1.6M</th>
</tr>
</thead>
<tbody>
<tr>
<td>15/16 (Year 1) target gross savings</td>
<td>65%</td>
</tr>
</tbody>
</table>

**Resourcing**
- TBD

**Program Scope**
The following deliverables will be achieved through the implementation of beds and patient flow initiatives:

**In scope**
- All clinical and non-clinical areas

**Interdependencies**
- Workforce
- Rationalization of services and procedures
# Three Month Workplan – Finance Controls

## Project 0: Design and Mobilization

### Key Activities:
- Under PMO leadership, design composition and governance structure of Financial and Clinical Optimization Implementation working group
- Engage appropriate clinical and non-clinical programs regarding the implementation program
- Rapid assessment of existing, relevant projects
- Confirm project-based metrics

### Outputs:
1. Individual detailed project plans and mandates
2. Finalized project logistics (i.e. team, ToR, KPIs)

## Project 1: Define financial governance and accountability structures and processes

### Key Activities:
- Review discretionary spend policies and procedures; centralize budgets and approval processes and implement auditing mechanisms
- Assess current capital complement; review and update capital replacement plan
- Centralize accounting for common HR benefit spend, including long-term disability and parental leave
- Review and rationalize current physician reimbursement policies, develop guiding principles for future allocation
- Review and rationalize current cost recovery practices, including private pay arrangements (e.g. Plastics activity)
- Conduct organization-wide, program specific budget review exercise, improving alignment of financial and operational capacity with demand

### Outputs:
1. Revised master capital plan
2. Revised physician reimbursement plan
3. Revised organizational financial, operational and clinical budgets
4. Centralization of selected spending envelopes and controls

**Expected Outcomes:** improved visibility to and alignment of budgeted and forecasted activity

## Project 2: Enhance data quality and performance management structures

### Key Activities:
- Conduct detailed, program-specific budget review, assessing alignment of budgets to demand and capacity
- Formalize Choosing Wisely committee, with clinical, operational and financial representation
- Conduct detailed costing of all surgical and pathway-based QBP activity to understand margin and inform management strategies
- Conduct initial consultations to understand information needs across the organization, data gaps and action plans as input into a well defined organizational performance management framework

### Outputs:
1. Program specific financial, operational and clinical KPIs
2. Defined future state reporting tools and processes, including rationalization of current list of reports

**Expected Outcome:** improved performance monitoring to inform timely decision making

## Project 3: Realize quick win and tactical savings

### Key Activities:
- Review and implement near-term opportunities, including discretionary, non-pay spend and budget reductions
- Rationalize partner hospital Finance and HR relationships
- Conduct detailed costing of all surgical and pathway-based QBP activity to understand margin and inform management strategies
- Conduct initial consultations to understand information needs across the organization, data gaps and action plans as input into a well defined organizational performance management framework

### Outputs:
1. Near-term cost savings action plan
2. Realized savings

**Expected Outcome:** momentum building quick win, cash releasing activities

## Stakeholder Involvement (relevant clinical and non-clinical programs and services)
Service Redesign

Objectives
► To ensure the right structures and enablers are in place for growth and sustainability of BCHS services
► To create and adhere to program investment and divestment guiding principles and implementation planning
► To right-size programs and services, ensuring focus on core mandate of the organization and optimization of patient service provision
► To ensure the appropriate organizational operating model and design is in place to expertly and strategically govern and promote a high performing organization.

Deliverables
► Strategically-driven organizational structure and operating model, taking into account the need to drive outcomes and the processes, governance, systems, services, individual performance, culture and talent of BCHS
► Organizational structures, resources and mechanisms to identify, capture, prioritize, monitor and sustain improvement initiatives
► Guiding principles and business cases for strategic service investment and divestment opportunities
► Business plan for the purposeful closure of the Willett Hospital
► Program Management Office to establish a structure and process to support, manage and monitor specific improvement projects targeted at cost saving for the organization in the areas of:
  ► Financial Controls, Beds, Workforce, and Programs and Services

Key Activities

<table>
<thead>
<tr>
<th>CIPs</th>
<th>Key Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Alignment and operating model framework development ($300K)</td>
<td>▶ Realign organizational structure to allow for clear and seamless governance and accountability structures and reporting arrangements&lt;br&gt;▶ Refine Physician Organization structure for improved internal alignment and role clarity&lt;br&gt;▶ Define the BCHS operating model which aligns to delivering the organization’s strategy and builds a consistent view of priorities, actions and investments.&lt;br&gt;▶ Put in place performance management mechanisms to identify, capture, prioritize and monitor improvement initiatives.</td>
</tr>
</tbody>
</table>

Benefits
Through this program of work BCHS will be able to:
► Improve operational performance through effective organization and implementation of standardized, leading practice processes
► Align clinical and operational activities to the core strategic mandate of the organization
► Enhance control, oversight and accountability over hospital operations
► Effectively monitor and quantify the impact of improvement initiatives undertaken throughout the organization
► Strategically identify and manage partner relationships and measure actual against expected benefits

Financial Impact

| Gross saving opportunity ($000) | 7.2M |
| 15/16 (Year 1) target gross savings | 10% |

Resourcing
► Improvement Program
► Physician Advisory Team

Program Scope
All clinical and non-clinical programs and services

Interdependencies
► Workforce
► Rationalization of services and procedures
► Financial and clinical controls
## Three Month Workplan – Service Redesign

### Detailed implementation design

<table>
<thead>
<tr>
<th>Project 0: Design and mobilization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Activities:</strong></td>
</tr>
<tr>
<td>▶ Under PMO leadership, design composition and governance structure of Financial and Clinical Optimization Implementation working group</td>
</tr>
<tr>
<td>▶ Engage appropriate clinical and non-clinical programs regarding the implementation program</td>
</tr>
<tr>
<td>▶ Rapid assessment of existing, relevant projects</td>
</tr>
<tr>
<td>▶ Confirm project-based metrics</td>
</tr>
<tr>
<td><strong>Outputs:</strong></td>
</tr>
<tr>
<td>1. Individual detailed project plans and mandates</td>
</tr>
<tr>
<td>2. Finalized project logistics (i.e. team, ToR, KPIs)</td>
</tr>
</tbody>
</table>

### Execution

<table>
<thead>
<tr>
<th>Project 1: Service review and operating model framework development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Activities:</strong></td>
</tr>
<tr>
<td>▶ Review current core and non core services</td>
</tr>
<tr>
<td>▶ Quantify share source and other opportunities</td>
</tr>
<tr>
<td>▶ Define future state operating model and design implementation plan</td>
</tr>
<tr>
<td>▶ Implement PMO structures to identify, capture, prioritize and coordinate improvement schemes</td>
</tr>
<tr>
<td><strong>Outputs:</strong></td>
</tr>
<tr>
<td>1. Sustainable PMO function</td>
</tr>
<tr>
<td>2. Redesigned organizational structures with clear accountabilities and alignment to organizational strategy</td>
</tr>
<tr>
<td><strong>Expected Outcomes:</strong> clarity of leadership, roles and mandates and mechanisms to drive sustainable improvements</td>
</tr>
</tbody>
</table>

### Savings realization

<table>
<thead>
<tr>
<th>Project 2: Core vs non-core service optimization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Activities:</strong></td>
</tr>
<tr>
<td>▶ Develop guiding principles and decision criteria for service investment and divestment</td>
</tr>
<tr>
<td>▶ Conduct detailed business case for the closure and sale of the Willett Hospital</td>
</tr>
<tr>
<td>▶ Conduct community partner and outsourcing relationship assessment</td>
</tr>
<tr>
<td>▶ Identify opportunities to start, stop and continue specific programs and services</td>
</tr>
<tr>
<td><strong>Outputs:</strong></td>
</tr>
<tr>
<td>1. Business plan to close and sell the Willett hospital</td>
</tr>
<tr>
<td>2. Rationalized community partner plan</td>
</tr>
<tr>
<td>3. Mechanisms to measure actual impact of services against expected benefits</td>
</tr>
<tr>
<td>4. Service investment and divestment criteria and implementation plan</td>
</tr>
<tr>
<td><strong>Expected Outcome:</strong> aligned clinical and operational activities and accountabilities to core strategic</td>
</tr>
</tbody>
</table>

### Stakeholder Involvement (relevant clinical and non-clinical programs and services)
### Three Month Workplan – Organization Realignment

<table>
<thead>
<tr>
<th>Detailed implementation design</th>
<th>Execution</th>
<th>Savings realization</th>
</tr>
</thead>
</table>

#### Project 0: Design and mobilization

**Key Activities:**
- Under Executive leadership, design composition and governance structure for Organizational Alignment activities
- Build a strong internal capability that can efficiently and effectively deliver BCHS services
- Consistently apply managerial layers and span of control
- Become a more flexible Organization that is responsive to the changing environment
- Foster a structure that encourages collaboration and quality and performance improvement

**Outputs:**
1. Detailed project plans and mandates
2. Finalized project logistics
3. Design alternative organizational alignment models on the basis of the identified capability requirements
4. Assign high-level accountabilities for the capabilities

**Expected Outcomes:** clarity of leadership, roles and mandates and mechanisms to drive sustainable improvements

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#### Project 1: Organizational redesign

**Key Activities:**
- Review current organization structure and gaps to future state
- Define future state requirements and design implementation plan
- Define functional capabilities

**Outputs:**
1. Organizational alignment with clear accountabilities and alignment to organizational strategy
2. Aligned Committees and roles

**Expected Outcome:** aligned organizational structure

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#### Project 2: Design implementation

**Key Activities:**
- Identify interdependencies in organizational realignment

**Outputs:**
1. Implementation plan updates
2. Refined outcomes and benefits tracking approach (may include a dashboard), where appropriate.
3. Aligned HR strategies and initiatives.

**Expected Outcome:** aligned organizational structure

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**Stakeholder Involvement (relevant clinical and non-clinical programs and services)**
Multi-Year Plan
Month 1

- Establish standard care pathways and discharge planning
- Develop ED admission criteria
- Develop model of care for weekend care and discharges

Month 3

- Review ALC practices RE: designation and targets
- Implement ED diversion, LOS and admission avoidance initiatives
- Develop and implement patient transfer and off service protocols

Month 6

- Patient cohorting: pilot
- Develop community partnerships for ALC management
- Develop model of care for weekend care and discharges

Month 12

- Patient cohorting: broad implementation
- Review and manage IP vs day case flow and rates
- Review location of procedures appropriate for alternative settings

Month 24

- Month 3
- Cash releasing savings

Month 36

- Month 1
- Develop ED admission criteria
- Implement ED diversion, LOS and admission avoidance initiatives
- Develop community partnerships for ALC management
- Develop model of care for weekend care and discharges

- Month 3
- Cash releasing savings

- Organizational Transformation
- Establish PMO
- Realign organizational structures
- Define and implement future state operating model
- Design and implement performance management framework
- Investment and divestment guiding principles, impact assessment, master plan
- Willett divestment: business case
- Willett closure: implementation plan
- Willett closure: decanting
- Willett closure: Sale and finalization

- Financial controls
- Redesign budgeting and forecasting practices
- Conduct case costing for high priority surgical (QBP) and care pathway activity
- Review data management and coding tools and processes
- Review and revise cost recovery practices
- Consolidate and centralize the management of non-service-specific organizational spend and controls

- Perioperative services
- Review booking and scheduling practices
- Review performance targets and reports
- Review and manage IP vs day case flow and rates
- Review location of procedures appropriate for alternative settings
- Capture case cost and reduce in-OR variation (start & stop, TAT, case length) -- prioritize high-margin QBP/Priority funded and high strategic value procedures
- Reduce delays and optimize pre- and post-surgical flow
- Optimize pre-op clinic
- Acuity based unit staffing: pilot
- Acuity based unit staffing: broad implementation

- Workforce optimization
- Review OT and sick time management programs
- Rationalize IPC implementation targets
- Unit-based FT:PT rationalization
- Implement nursing casual pool management improvements
- Consolidate shared resource functions
- Acuity based unit staffing: pilot
- Acuity based unit staffing: broad implementation

- Beds & patient flow
- Establish standard care pathways and discharge planning
- Develop ED admission criteria
- Develop model of care for weekend care and discharges

- Review and manage IP vs day case flow and rates
- Review location of procedures appropriate for alternative settings
- Capture case cost and reduce in-OR variation (start & stop, TAT, case length) -- prioritize high-margin QBP/Priority funded and high strategic value procedures
- Reduce delays and optimize pre- and post-surgical flow
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- Acuity based unit staffing: pilot
- Acuity based unit staffing: broad implementation
- Consolidate shared resource functions
- Acuity based unit staffing: pilot
- Acuity based unit staffing: broad implementation