

Appendix J: Summary of Financial Impacts Identified by Working Groups

As part of the facilitated integration process, each of the Working Groups was required to consider the *order of magnitude* financial impact of the potential integration opportunities identified. Any financial impact provided in this report and the Working Group Workbooks are to be considered high-level estimates only and are to be used for the purpose of considering the value proposition of a possible merger. Estimated cost savings attached to these opportunities could represent examples of the potential theoretical savings opportunities outlined in the economies of scale and operating efficiencies benchmarking analysis (refer to Section 6).

Based on the nature of the opportunities and the data available, not all opportunities were able to receive a full financial analysis and more detailed financial and business planning will need to occur prior to implementation. These estimates provide a “bottom-up” approximation of potential financial implications related to a possible merger.

Summary of Working Group Estimates

High level analyses from the Working Groups identified order of magnitude savings by short/medium and long term timeframes. Overall, the distribution of opportunities is as follows:

Table 1: Opportunity Timeframe

Opportunity Timeframe	Number	Estimated Savings (\$000s)	Estimated Investment (\$000s)
Short/Medium Term (1-3 years)	36	\$4,730 to \$7,530	\$1,080 to \$1,280
Long Term (3+ years)	10	\$530 to \$2,125	\$5,760 to \$9,700
Total	46	\$5,260 to \$9,655	\$6,840 to \$10,980

Based on the Working Group estimates, the following summary table provides the estimated financial impact of specific opportunities identified by the various Working Groups.

Table 2: Summary of Financial Impact

Working Group Cluster	Estimated Operating Cost Savings (\$000's)	Estimated Capital Expenditure Savings* (\$000's)	Estimated Incremental Revenue/ (Operating Costs) (\$000's)
Clinical programs	\$1,835 to \$4,010	\$2,400	
Back office	\$3,425 to \$5,645	-	
Revenue generation			\$770 to \$1,640
Operating costs			(\$6,010)
Total	\$5,260 to \$9,655	\$2,400	(\$5,240) to (\$4,370)

*Savings estimated to occur every 5 years, not annually

The net financial impact outlined above is \$20K – \$5.3M savings annually primarily in the mid to long-term horizon, with an additional \$2.4M in capital expenditure savings every 5 years.

Detailed Look at the Financial Impacts

The potential financial impact of all of the integration opportunities generated by the Working Groups is summarized below.

Potential Cost Savings

Across the Working Groups, there are many examples of cost savings that could be realized through a possible merger. Many of the potential savings estimated can be framed as “avoidable expenses” driven by quality improvement and service excellence, which could reduce adverse events, length of stay, or ALC days.

In back office areas, Working Groups identified potential savings through consolidation, centralization and standardization. Operational and capital spend savings can also be realized through strengthened purchasing power. For instance, in Diagnostic Imaging, Laboratory Services, Human Resources and Finance there are economies of scale for purchased services and savings on big ticket system and equipment acquisitions.

The estimated potential cost savings from all identified opportunities is in the order of \$5.3 million to \$9.7 million. See table on next page.

Table 3: Potential Cost Savings

Opportunity Description		Timeline	Order of Magnitude Net Savings \$000s			
			Operating Range		Capital Range*	
			Low	High	Low	High
Clinical Program						
Post-Acute Care	Improved access within Scarborough to funded Rehab and Complex Continuing Care beds – <i>reducing ALC days for patient waiting for transfer to inpatient rehab</i>	Short-term	\$500	\$500		
Diagnostic Imaging	Increased purchasing power for Diagnostic Imaging equipment and supplies	Medium-term	\$75	\$185	\$2,400	\$2,400
Pharmacy	Medication reconciliation – <i>reduction in adverse events and reduction in length of stay increases caused by medication errors**</i>	Medium-term	\$780	\$1,700		
Pharmacy	Implementation of technology in Pharmacy Services – electronic Medication Administration Record (eMAR) and Computerized Physician Order Entry – <i>reduction in adverse events**</i>	Long-term	\$200	\$700		
Laboratory Services	Sharing of service, repatriation of specialized tests and/or test relocation, including: <ul style="list-style-type: none"> • Consolidation of microbiology volumes • Better prices for outsourced highly specialized tests • Acquire ability to do molecular biology testing for Influenza in-house 	Long-term	\$280	\$925		
Total Clinical Programs			\$1,835	\$4,010	\$2,400	\$2,400

Back Office						
Hotel Services	Shared Capital Planning & Capital Project Management	Medium-term	\$45	\$300		
Hotel Services	Shared Unified Central Call Centre	Medium-term	\$50	\$160		
Hotel Services	Consolidated Diet Office	Medium-term	\$80	\$250		
Human Resources	Leveraging HRIS technology – <i>estimated savings in overtime and sick-time as a result of implementation of automated rules-based scheduling</i>	Medium-term	\$1,000	\$1,700		
Human Resources	Merged service contracts for purchased services and programs / potential outsourcing opportunities	Medium-term	\$260	\$325		
Finance	Consolidation of Finance function leading to process and staff efficiencies	Medium-term	\$30	\$500		
Finance	Purchasing process improvement and standardization – <i>estimated savings in insurance, professional fees, clinical laboratory supplies, as well as general plant maintenance</i>	Medium-term	\$1,300	\$1,300		
Finance	Logistics process improvement and standardization	Medium-term	\$310	\$310		
IM/IT	Leverage existing sites and IT Infrastructure and resources to provide a lower cost disaster recovery solution	Medium-term	\$300	\$300		
Hotel Services	Centralized Meal Tray Assembly & Logistics	Long-term	\$50	\$500		
	Total Back Office		\$3,425	\$5,645	-	-
	Total Clinical Programs and Back Office		\$5,260	\$9,655	\$2,400	\$2,400

* Savings estimated to occur every 5 years, not annually

**Savings estimated based on the assumption that CPOE and eMAR are implemented.

Potential Revenue Generation

A few Working Groups identified integration opportunities that may result in increased revenue. Opportunities to increase patient revenue were identified by Laboratory Services and Finance. From a retail perspective, the Finance Working Group identified the opportunity to leverage the newly developed strategy at RVHS to enhance retail revenues at TSH.

The estimated potential incremental revenue from all identified opportunities is in the order of \$0.8 million to \$1.6 million.

Table 4: Potential Revenue Opportunities

Opportunity Description		Timeline	Order of Magnitude Annual Revenue Range \$000s	
			Low	High
Clinical Program				
Laboratory Services	Sharing of service, repatriation of specialized tests and/or test relocation – <i>Acquiring the ability to do molecular biology testing for Influenza in-house leads to a reduction in isolation beds and creating the opportunity for increased private accommodation revenue (from freeing up rooms with single beds)</i>	Long-term	\$ 70	\$140
Back Office				
Finance	Improved financial reporting and standardization of work processes – <i>leading to increased annual patient revenue</i>	Medium-term	\$ 200	\$500
Finance	Develop and implement a Master Retail Strategy at TSH following the model of the 2013 Master Retail Strategy launched at RVHS	Medium-term	\$ 500	\$1,000
			\$770	\$1,640

Potential Incremental Operational Costs

Certain Clinical Working Groups identified some opportunities which would bring value to patients but involve incremental operational costs. For the clinical support services Working Groups of Pharmacy and Laboratory, the increased operational costs are driven by opportunities to move to leading practices in patient safety and medication management.

For the Oncology, Maternal Child and Palliative Care Working Groups, the increased operational costs are driven by the program advancements proposed. The development of Centres of Excellence and regional programs bring significant benefits to the Scarborough and west Durham community. At the same time, however, there is recognition by these Working Groups that such program advancements will drive up operational costs. For the Oncology, Maternal Child and Palliative Care opportunities, increasing market share (thereby increasing patient volumes) and achieving leadership in these areas requires program investment in order to realize the long-term benefits.

The estimated potential incremental operating costs associated with these opportunities is in the order of \$6 million.

Table 5: Potential Incremental Costs

Opportunity Description		Timeline	Order of Magnitude Annual Operational Cost Range (\$000s)	
			Low	High
Clinical Program				
Laboratory Services	Critical mass for new lab investment in Positive Patient Identification (PPID) technology system – <i>enabling improved patient safety and operational efficiency</i>	Medium-term	(\$110)	(\$110)
Pharmacy	Medication reconciliation	Medium-term	(\$700)	(\$700)
Pharmacy	Incremental staffing to support Electronic Medication Administration Record (eMAR) and Computerized Physician Order Entry (CPOE)	Long-term	(\$800)	(\$800)
Oncology	To strive for a Centre of Excellence in Cancer Care that is recognized within the community and that enhances funding and resource allocation	Long-term	(\$2,200)	(\$2,200)
Palliative Care	Development of a Centre of Excellence for Palliative Care in Scarborough and the development of a Centrally Coordinated Palliative Care Resource Model in Scarborough	Long-term	(\$2,200)	(\$2,200)
			(\$6,010)	(\$6,010)

Potential One-Time Investments

Across the Working Groups there are certain integration opportunities that would require one-time investments. From the clinical programs, the Laboratory Services and Pharmacy Working Groups provided an estimate of the one-time investments required in technology, infrastructure and outsourcing to support the integration opportunities. In order to realize potential savings from service consolidation and centralization, the Hotel Services Working Group identified required one-time capital investments related to the Diet Office and Meal Tray Assembly opportunities.

Some Working Groups identified certain investments as opportunities. For example, to modernize the clinical technology platform across a merged organization – and enable organizational improvements in quality, safety, productivity and utilization – would require additional investments in the Hospital Information System (HIS) and in Computerized Physician Order Entry (CPOE). These are not requirements for the merged organization, but would enable increased efficiency and patient safety benefits if these investments are made.

Table 6: Potential One-Time Investments

Potential Integration Opportunity		Timeline	Order of Magnitude One-Time Investment Range (\$000s)	
			Low	High
Clinical Program				
Laboratory Services	Critical mass for new lab investment in Positive Patient Identification (PPID) technology system – <i>enabling improved patient safety and operational efficiency</i>	Medium-term	(\$780)	(\$780)
Laboratory Services	Outsourcing highly specialized tests - one-time initiation fee to join Shared Hospital Laboratory (SHL)	Long-term	(\$300)	(\$300)
Pharmacy	Implementation of technology in Pharmacy Services – electronic Medication Administration Record (eMAR)	Long-term	(\$3,500)	(\$3,500)
Pharmacy	Centre of excellence for Centralized Intravenous Admixture (CIVA) service	Long-term	(\$1,600)	(\$1,900)
Back Office				
Hotel Services	Consolidated Diet Office	Medium-Term	(\$300)	(\$500)
Hotel Services	Centralized Meal Tray Assembly & Logistics	Long-term	(\$360)	(\$4,000)
			(\$6,840)	(\$10,980)

Efficiencies (Non-Quantified)

It is important to note that many Working Groups identified integration opportunities with potential efficiency gains that were not quantified into savings (or avoidable expenses) yet still contribute to the overall value proposition. Examples include: the sharing of education, training, information, resources and expertise, further enhancements to existing areas of strength and decreasing wait times. These efficiency benefits are driven by factors such as critical mass, collaboration and consolidation.

Table 7: Other Potential Efficiencies (Non-Quantified)

Opportunity Description		Timeline	Potential Efficiency
Clinical Program			
Pharmacy	Sharing of education, training, information, resources and expertise	Medium-term	<ul style="list-style-type: none"> • Improved workflow and staff efficiency
Mental Health	Expand shared care model across both organizations	Medium-term	<ul style="list-style-type: none"> • Improve access and excellence in service provision
Cardiology	Further enhance the joint centres of excellence by fully integrating services - enabling the provision of seamless patient care delivery across the cardiovascular continuum.	Long-term	<ul style="list-style-type: none"> • Increasing ambulatory cardiac clinics • Reduction in inpatient length of stay
Diagnostic Imaging	Improve access to care - centralized booking combined with implementation of utilization management	Long-term	<ul style="list-style-type: none"> • Decreased wait times and operational efficiencies
Back Office			
IM/IT	Merge admitting, bed allocation and registration functions and share process and best practices	Short-term	<ul style="list-style-type: none"> • Utilization and productivity gains
IM/IT	Merge Health Information Management departments under a single management structure and create a single department	Medium-term	<ul style="list-style-type: none"> • Better utilization of resources