

Ministry of Health
and Long-Term Care

Health Capital Division

Health Capital Investment
Branch

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Ministère de la Santé
et des Soins de longue durée

Division des immobilisations dans le
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Direction de l'investissement dans les
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FEB 22 2016

Ms. Natalie Bubela
Chief Executive Officer
Muskoka Algonquin Healthcare
100 Frank Miller Drive
Huntsville, ON P1H 1H7

Dear Ms. Bubela:

**Re: Muskoka Algonquin Healthcare Proposed Capital
Redevelopment Project, Stage 0 Pre-Capital Submission**

The Ministry of Health and Long-Term Care (the ministry) has reviewed your hospital's response that we received on February 3, 2015, to our comments on your Pre-Capital submission for the proposed capital redevelopment project. The results of our review are enclosed.

Should you have any questions, please contact Paul Nichols, Senior Consultant, North and East Capital Projects, Health Capital Investment Branch at 416-326-1108.

Sincerely

A handwritten signature in cursive script that reads "Anne Barszczewski".

Anne Barszczewski
Manager
North and East Capital Projects

Enclosure:

c: Jill Tettman, Chief Executive Officer, North Simcoe Muskoka LHIN
Archie Outar, Senior Manager Finance North Simcoe Muskoka LHIN

Issues/Comments Form

HSP Name: Algonquin Muskoka_Huntsville
 Project Name: Capital Redevelopment Project
 Stage of Project: Pre-Capital
 Original Submission Date: 29-Oct-15
 Additional Submission Date(s):

Status Indicator Legend:
 Resolved Answer is satisfactory
 In Progress Ministry is asking for additional follow up info that will be logged as a new question
 Outstanding Ministry question remains unanswered

Part A - Program and Service

Issue/Comment Status Indicator	Date of Submission (yyyy-mm-dd)	Submission Reference (Item/Pg No.)	Issues/Comments	Issue/Comment Source	Date of Response (yyyy-mm-dd)	Response Source	Response (Comment or Reference Document Name)	Date of Response (yyyy-mm-dd)	Response Source	Response (Comment or Reference Document Name)	Issue/Comment Resolved? (Y/N/P)
Resolved	2015-10-29	P. 6 & 7	Using the workload tab, please provide rationale for negative variances or >+20%.	MOH-1	2016-01-25	HSP	A line by line explanation of the negative variances and variances >20% is included in the workload tab.	2016-02-19	MOH-1	Workload tab information reviewed	Yes
In Progress	2015-10-29	P. 6	Under ambulatory Services Fracture Clinic (in ED) and Cardiology ED Procedures are identified, were these procedures double counted e.g. as part of ED and also under Ambulatory?	MOH-1	2016-01-25	HSP	Visits to the Fracture Clinic occur in Emergency Department space, however, the workload has been recorded separately from the Emergency Department workload in the forecast estimates. In 2013-14 these visits were recorded with the ED visit workload.	2016-02-19	MOH-1	Is there a plan to continue to see Fracture room Clinic patients in ED? Please use #13 for response	In Progress
Resolved	2015-10-29	P. 6	Dialysis is reported as Annual Treatments, are these patients being dialyzed or are these follow up clinic visits?	MOH-1	2016-01-25	HSP	Dialysis annual treatments reflects patients being dialyzed. MAHC's Dialysis Unit has six treatment stations operating over two shifts, administering 12 treatments per day, six days per week.	2016-02-19	MOH-1		Yes
Resolved	2015-10-29	P. 6	Pacemaker volumes were provided for 2012-13 however nothing in subsequent years, where are pacemakers now being implanted?	MOH-1	2016-01-25	HSP	MAHC's Pacemaker Clinic is for follow-up care only (post implantation). In 2013-14 the reporting of visit volume was moved under the category of Cardiology Outpatient procedures.	2016-02-19	MOH-1		Yes
Resolved	2015-10-29	p. 8	Please identify when the decision related to 10 stroke rehab beds will be made (currently not in projected bed complement)	MOH-1	2016-01-25	HSP	At the direction of the NSM LHIN. Currently a pilot project is being conducted between RVH and Collingwood to help better understand the model, business case, etc. This will help guide the future rollout of the NSM LHIN regional plan with respect to the provision of acute stroke care and rehabilitation.	2016-02-19	MOH-1		Yes
Resolved	2015-10-29	p. 8/11	Is the HSP planning for a "campus of care service model" that includes space for partners in the proposed new hospital building?	MOH-1	2016-01-25	HSP	MAHCs future planning includes thinking about how programs and services are integrated, coordinated and planned throughout the District, regardless of the location of service providers. Planning collaboratively with Health Links, and relying heavily on the Price/Baker report and the Ministry Patients First document, system thinking will be prevalent at all levels of planning. Special focus on Muskoka specific challenges such as outreach, and travel will be further explored in Stage 1. Currently, office space is provided for CCAC and SASOT (Seniors Assessment and Support Outreach Team) and has been included in the future building footprint. Accommodating other organizations such as the Family Health Team, Hospice and a satellite of One Kids Place, currently located on MAHC hospital sites, is not formally part of the proposed development as noted in Part 1B of the Pre-Cap but will also be explored in a Stage 1 Proposal.	2016-02-19	MOH-1		Yes
In Progress	2015-10-29	p. 10	Please provide the information related to the various service models that were "developed and tested".	MOH-1	2016-01-25	HSP	As part of the master programming process, a series of workshops were conducted involving multiple groups of stakeholders and senior leadership with the intent of assessing various models for program/service delivery. Seven clinical user groups were formed focusing on key clinical services, namely, Emergency Services, Ambulatory Care, Surgical Services, Maternal Child and Inpatient Services. Linking efforts from MAHC's recent refreshed strategic planning work created a nice segue from a 1-3 year planning view to a 20-year horizon, allowing for the groups to consider what the market context might be in that time, how the service delivery model might change to succeed in that environment and what implications such changes had for facilities. The workshops focused on several objectives including: • Understanding how MAHC's services are utilized by the catchment population i.e. the drivers of healthcare demand • Reviewing anticipated changes in demographics for the catchment population over a 20-year horizon • Reviewing the impact of 20-year projections on workload and service delivery • Assessing service planning opportunities over the 20 year planning horizon, addressing consolidation potential, program/operational process standardization and service siting options. • Factoring the impact of technology on service delivery • Ensuring changes to the service delivery model align with MoHLTC and LHIN priorities. The advantages and disadvantages of the various siting options for each of the models along with all of the demographic and workload analysis is highlighted in the recently completed Master Program document, now posted to the MAHC website - http://www.mahc.ca/en/about/resources/0_MAHCMasterProgramOctober2015recvdOct2815.pdf . An outcome of the workshops was the development of nine. During the master programming process, the Emergency Department user group reviewed all CTAS data and established improved utilization targets for 'avoidable' ED visits i.e., CTAS 4 and 5 and a portion of CTAS 3. Incorporated into the planning is a targeted decrease of avoidable ED visits closer to the 75th percentile rate of the Province. A fundamental assumption to the targeted utilization is that several initiatives established over the past few years such as nurse practitioner clinics, involvement of CCAC in ED, and extended after-hours coverage by family physicians will result in lower utilization targets for the avoidable ED visit. MAHC is currently working with Health Links towards a new model of primary care delivery, aligned with Patient Care Groups consistent with the recommendations of the Price/Baker report and the Patients First Discussion Paper. Muskoka Community Health Link recently introduced three new Health Hubs and a Mobile Unit in Muskoka to meet the needs of remote and underserved areas. These initiatives along with continued partnerships with other community agencies, LHIN focus, and ever evolving practices will assist MAHC in achieving the projected targets in the planned time frame.	2016-02-19	MOH-1	Have the new proposed models been trialed where possible to inform the new design? Please insert response in row 14	In Progress
Resolved	2015-10-29	P. 6	Given that 65% of projected Emergency Department (ED) visits (CTAS 4/5 and 50% of CTAS 3) are low acuity, has planning been undertaken to decant more of this activity to community providers versus retaining the activity in the ED/hospital?	MOH-1	2016-01-25	HSP	MAHC ALC targets are aligned with the NSMLHIN targets. MAHC is working closely with community primary care providers to develop joint Quality Improvement Plans and align targets. As noted in response to question #8 the recently announced three new Health Hubs and a Mobile Unit along with continued partnerships with other community agencies will assist MAHC in achieving the projected targets in the planned time frames. Continued focus of the NSMLHIN on ALC as its top priority will continue to identify opportunities and strategies to meet ALC targets.	2016-02-19	MOH-1	What strategies are planned to reduce ALC rates, it is not clear how Health Hubs and Mobile Units will address this issue. See Line #15	Yes
Outstanding	2015-10-29	P. 6	How does the plan to reduce the ALC rate from 28% to 9.5% over 20 years (p. 6) align with the LHIN target for ALCs? How will this be accomplished?	MOH-1	2016-01-25	HSP	MAHC ALC targets are aligned with the NSMLHIN targets. MAHC is working closely with community primary care providers to develop joint Quality Improvement Plans and align targets. As noted in response to question #8 the recently announced three new Health Hubs and a Mobile Unit along with continued partnerships with other community agencies will assist MAHC in achieving the projected targets in the planned time frames. Continued focus of the NSMLHIN on ALC as its top priority will continue to identify opportunities and strategies to meet ALC targets.	2016-02-19	MOH-1	What strategies are planned to reduce ALC rates, it is not clear how Health Hubs and Mobile Units will address this issue. See Line #15	No
Resolved	2016-01-13	General Comment	The ministry expects the stage 1 submission will explore and evaluate the option of new build versus renovation of existing sites and the option of a one site consolidation or continued operation on two sites.	MOH-1	2016-01-25	HSP	Agreed. As part of the Stage 1 process the Hospital plans to undertake a thorough assessment of all development options including the operational and economic impact of the various options on hospital funding and community/regional infrastructure resources. MAHC is already working with the NSMLHIN and local municipalities exploring and refining options.				Yes
Outstanding	2016-02-03		Provide the volume of births historical, current and projected. Indicate number of C-Sections.	MOH-1						new question	
Outstanding	2016-02-03		Please provide further rationale at the next stage for the projected growth in medical surgical activity. Include any plans to shift in patient activity to	MOH-1						new question	
Outstanding	2016-02-03		See #2								
Outstanding	2016-02-03		See #7								
Outstanding	2016-02-03		See#9								

Issues/Comments Form

HSP Name: Algonquin Muskoka_Huntsville
 Project Name: Capital Redevelopment Project
 Stage of Project: Pre-Capital
 Original Submission Date: 29-Oct-15
 Additional Submission Date(s):

Status Indicator Legend:

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Part B - Physical and Cost

Issue/Comment Status Indicator	Date of Submission (yyyy-mm-dd)	Submission Reference (Item/Pg No.)	Issues/Comments	Issue/Comment Source	Date of Response (yyyy-mm-dd)	Response Source	Response (Comment or Reference Document Name)	Date of Response (yyyy-mm-dd)	Response Source	Response (Comment or Reference Document Name)	Issue/Comment Resolved? (Y/IP/N)
1	In Progress	2015-10-29	Item 7. Space Requirements	Explain the 21% increase in proposed BGSF (to 2019-20 planning horizon) from the current total BGSF combined across both MAHC sites. It is anticipated that some space savings should be gained through efficiencies as identified in question 10. This is to be addressed in detail in the Stage 1 submission.	MOH-1						
2	In Progress	2015-10-29	Item 9. Renovation Practicality	The stage 1 submission is required to contain a Technical Building Assessment. Note that the VFA reports, referenced in the pre-capital submission, are not sufficient for evaluation of stage 1 submission. Refer to the Capital Planning Manual, MOH/TC-LHN Joint Review Framework and CSA Plus 317 for additional information on the required technical building assessment. This is to be included with the Stage 1 submission for both existing facilities.							
3		2015-10-29	Item 13. Alternative Infrastructure Solutions	Additional detail of the options analysis are to be included in the Stage 1 submission. Provide a detailed explanation of the evaluation criteria outlined in Appendix B and how the development options were evaluated. Explain why the 5 alternate development options were eliminated from the final options list. Describe the assumptions made for each development proposal regarding the extent of reuse, renovation or redevelopment of existing facilities for the options that retain existing sites. To be included in the Stage 1 options analysis.							
4	In Progress	2015-10-29	Item 13. Alternative Infrastructure Solutions	In addition to the development models being explored in the options analysis, identify which options may support an alternate (i.e. phased) implementation and the challenges/benefits that may be associated with an alternate implementation. To be included in the Stage 1 options analysis.							
5	In Progress	2015-10-29	General Comment	Capital Planning Bulletins on Master Planning and Flexibility and Adaptability provide additional information to support the development of the Stage 1 proposal. The ministry will be provide these at the next stage submission.							
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Beds

	2012-13	2013-14	Variance 2013-14 to 2013-14	2014-15	Variance 2013-14 to 2014-15	2019-20	Variance 2014-15 to 2019-20	2024-25	Variance 2019-20 to 2024-25	2034-35	Variance 2024-25 to 2034-35	
												For Overall Approach to Bed Projections See note below the Table.
Medicine	69	61	-12%	66	8%	67	2%	69	3%	86	25%	Currently operate at above 100% capacity, even with anticipated strategies to reduce admissions and length of stays, additional beds are needed over the planning horizon to meet community needs. In 2013-14 there was a 12% bed reduction as part of a budget exercise. For planning, LHIN target of 85% occupancy was used for Med/Surg beds.
Surgery (not formally designated currently)	0	0		0		13		15	15%	18	20%	should be reviewed in conjunction with medicine as they are currently blended units.
Critical Care	9	9	0%	9	0%	7	-22%	8	14%	10	25%	MAHC has a high propensity to admit inpatients to the ICU. Projections assume a decrease in ICU bed requirements over the next 10 years and then a ramp up by 1 additional bed over current based on demographics over the 20-year planning horizon reflective of improved admission practices and the development of Medical/Surgical Step-Down/Up beds to support more appropriate levels of care. Single-siting ICU beds will also result in fewer beds.
Obstetrics	5	5	0%	5	0%	3	-40%	3	0%	3	0%	Based on demographic forecasts that number of births are anticipated to decrease in the 5-year interval accounting for the reduction of two beds and then slowly ramp up to current volumes for the 20-year horizon. The population of women of child bearing age is not expected to increase over the next 20-years in the Muskoka subLHIN.
CCC	28	24	-14%	16	-33%	18	13%	20	11%	22	10%	CCC beds were reduced over the past couple of years as MAHC Beds are part of a NSM-LHIN regional program, and much work has been done to align the program bed numbers with current need and match utilization.
Total	111	99	-11%	96	-3%	108	13%	115	6%	139	21%	Overall total number of beds increased by a very modest 21% over 20 year planning horizon- refer to explanation below table. The 2013-14 bed reduction is explained above.
Nursery	3	3	0%	3	0%	2	-33%	2	0%	2	0%	The projections for nursery bassinets follows the Obstetrics forecasts.

Volume Projections

	2012-13	2013-14	Variance 2013-14 to 2013-14	2014-15	Variance 2013-14 to 2014-15	2019-20	Variance 2014-15 to 2019-20	2024-25	Variance 2019-20 to 2024-25	2034-35	Variance 2024-25 to 2034-35	
Emergency Department												
CTAS 1 & 2	2473	4079	65%	4034	-1%	4268	6%	4518	6%	5069	12%	In 2012-13 there were changes to the CTAS tool provincially (eg modifiers to support Triage level decision, inclusion of Mental health patients with suicidal/harm ideation as CTAS 2) and again in the fall of 2014 (minor additions to the CEDIS list i.e. separated apnea spells: witnessed/recent, history of apneic spells) . This had the overall impact of up-triaging explaining the 65% increase which in absolute number is relatively small – 1606 cases.
CTAS 3	17078	18204	7%	18317	1%	19136	4%	20143	5%	22497	12%	
CTAS 4 & 5	23213	20572	-11%	21154	3%	15914	-25%	16716	5%	18460	10%	Refer to Response to question#8 in the Pre-Cap tab. In addition, the Nurse Practitioner led clinic in Huntsville opened in 2012/13 which relieved some of the less urgent volumes from the emergency department.
Total	42764	42855	0%	43505	2%	39318	-10%	41377	5%	46026	11%	
Percent CTAS 4 & 5	54%	48%	-12%	49%	1%	40%	-17%	41%	0%	40%	-1%	Refer to Response to question#8 in the Pre-Cap tab.
Percent CTAS 1/2 CTAS 3 & 4 & 5	74%	69%	-7%	70%	1%	65%	-7%	65%	0%	65%	0%	Refer to Response to question#8 in the Pre-Cap tab.
Ambulatory Care Services												Note: There were recording errors in the Workload Table for the nine Ambulatory Care indicators at the 20-year horizon that have now been corrected and highlighted in green. Explanations for variances >20% are noted in the comments section.
Surgical Clinic	2919	2326	-20%	2034	-13%	2184	7%	2477	13%	2703	9%	In 2013-14 there was an over reduction in the available clinic time to the surgeons as it was felt this ambulatory volume did not belong in an acute care setting. As well over the past few years the practice of bringing in locums to replace surgeons stopped for a period of time. Several surgeons were taking some time off and no locums came in and therefore the volumes decreased.
Off Load Clinic/Procedures	1422	503	-65%	254	-50%	273	7%	309	13%	331	7%	Surgical Services Committee and leadership undertook an extensive project to review all work being done in surgical clinics and off load clinics and establish criteria that created greater controls over what was done in Hospital based clinics vs. alternative sites (such as physicians offices). This resulted in a significant reduction in caseloads seen in hospital based clinics.
Fracture Clinic Visits (in ED)	3108					2713		2876	6%	3198	11%	In 2013-14 reporting of Fracture visit workload has been reported under the Emergency Department but separated for the three projection intervals.
Nutrition Consults	38	38	0%	30	-21%	34	13%	42	24%	51	21%	In 2014-15 small visit volume no explanation for the reduction of 8 consults, likely normal fluctuation. These consults increase at the growth rate of MAHC acute medical / surgical inpatients. .
Diabetes Visits	5035	3452	-31%	3058	-11%	3325	9%	3885	17%	4422	14%	The 2012/13- 2013/14 period was the transition from NDHN to the LHIN Regional Diabetes Coordination which resulted in some realignment of patients to FHT's for pre-diabetes and education and resulted in less volume for these populations. Quite a bit of work was done such as value stream mapping with all stakeholders to clarify roles. The Ministry's Diabetes Strategy report (2013) outlined and predicts a continual increase in prevalence as well as associated conditions for diabetes (ie renal,) for NSM each year. The 2014-15 decrease in volumes were also a result of staffing vacancies and not reflective of decrease in need. Given those factors and sources of information, I think the 2019-20 projections are within expectations. The 2024-25 window would depend if the service remains hospital based or is incorporated into future models such as Community health centers or FHT.
Dialysis Annual Treatments	2689	3370	25%	3405	1%	3653	7%	3900	7%	4440	14%	The 2012-14 25% increase is related to the addition of one treatment station (5 stations to 6). Projections have been updated to reflect the Ontario Renal Network 2014-2024 draft capacity plan.
Systemic Therapy Treatments	954	1029	8%	1349	31%	1548	15%	2028	31%	2489	23%	There is the positive variance for systemic therapy treatments going out to 2024/25 and 2034/35 which can be explained by an expected increase in need for oncology services as the population continues to age and the increase in cancer incidence in the older population.
Oncology Clinic Visits	1837	1874	2%	1798	-4%	2063	15%	2703	31%	3299	22%	There was a review of ambulatory services in 2013/14 and a single siting of oncology in 2014 which would explain the very small decrease in the actual volumes in 2014/15. There is the positive variance for oncology clinics going out to 2024/25 and 2034/35 which can be explained by an expected increase in need for oncology services as the population continues to age and the increase in cancer incidence in the older population.
Medical Day Care Visits	1838	1834	0%	1816	-1%	2034	12%	2538	25%	3077	21%	Medical day care visits increase at the growth rate of MAHC medical/surgical inpatients.
Pacemaker Visits	597											data beyond 2012-13 is included in Cardiology OP procedures
Surgery Cases												
In Patient	804	855	6%	815	-5%	876	7%	941	7%	1074	14%	
Outpatient Cases/SDC	3292	3371	2%	3015	-11%	3277	9%	3540	8%	4060	15%	As stated above, the practice of bringing in locums to replace surgeons stopped during the time in question of the data. Several surgeons took time off and no locums came in and therefore the volumes decreased. In 2014/15, one surgeon was off for 9 months on a maternity leave and no locum coverage.
Cataracts	704	675	-4%	696	3%	803	15%	913	14%	1127	23%	Cataracts are forecast to increase with the growth and aging of MAHC's cataract patients.
Endoscopy	4263	4367	2%	4314	-1%	4007	-7%	4229	6%	3875	-8%	In 2014/15, one surgeon was off for 9 months on a maternity leave and no locum coverage.
Allied Health Services												
Rehabilitation	23331	24969	7%	24622	-1%	27221	11%	29732	9%	35524	19%	

Clinical Nutrition	1375	1291	-6%	1054	-18%	1186	13%	1325	12%	1656	25%	Clinical nutrition attendance days are forecast to increase with population growth and aging of MAHC's population. We used a weighted average of the inpatient / medical surgical forecast and the day surgery forecast to grow the inpatient and outpatient clinical nutrition attendance days.
Social Work - Stroke only						430		515	20%	645	25%	Should be removed from the Table as Stroke Beds are no longer planned for at this time.
Cardiorespiratory Services												
Cardiology IP	3127	3085	-1%	2682	-13%	3057	14%	3932	29%	5106	30%	Cardiology inpatient increases with the expected population growth and aging of MAHC cardiology inpatients.
Cardiology OP	833	2229	168%	1218	-45%	1313	8%	1396	6%	1538	10%	Over the past few years the Hospital has been building up the Echo program included under Cardiology. In 2014/15 some echo procedures moved from CardioResp to DI – which resulted in a drop in numbers in CardioResp and a growth in DI Ultrasound/Echo workload.
Cardiology ED Procedures	9334	8700	-7%	9574	10%	8645	-10%	9089	5%	10098	11%	These procedures are not counted as part of ED visit activity
RT Procedure IP	40859	34431	-16%	22008	-36%	22299	1%	25012	12%	30043	20%	Respiratory inpatient increases with the expected population growth and aging of MAHC respiratory inpatients.
RT Procedures OP	42960	42041	-2%	15763	-63%	16110	2%	17010	6%	18165	7%	December 2014 – Cardioresp moved to a new methodology of collecting stats. Previous method was to roughly add up the cases to match the totals required for the amount of FTE. The new system requires the individual RRTs to provide the data per day to improve on accuracy. Adherence to task completion was low resulting in 2014-15 data concern: education and standardization for RRTs occurred Nov 20th, 2015. If we use the % change in RRT tech fee actuals to estimate change in OP procedures – it should be an increase of 7% from 2013-14, and 1% increase between 2013-14 to 2014-15
Diagnostic Imaging Services												
General Radiology/IR exams	38489	40438	5%	41238	2%	41581	1%	44284	7%	49800	12%	
Interventional Exams	405	410	1%	441	8%	460	4%	521	13%	608	17%	
Mammography Exams	4061	4280	5%	4315	1%	4651	8%	4946	6%	5447	10%	
OBSP Exams	1721											
CT Scanning Exams	16479	16795	2%	19614	17%	20716	6%	22091	7%	24643	12%	
Ultrasound/Echo Exams	17084	19918	17%	24820	25%	26255	6%	28045	7%	31425	12%	Echo procedures at SMMH moved to DI in Sept 2013. The preceding months there was a significant slow down in procedures due to a retirement and staff availability.
Nuclear Medicine	3254	2715	-17%	2829	4%	2571	-9%	2709	5%	3024	12%	One of the machines was down for a period of time and there was the Isotope shortage from Chalk River in 2013-14.
BMD Exams	2138	2086	-2%	1987	-5%	2146	8%	2275	6%	2502	10%	2014-15 BMD workload as well as projections were omitted in error and are now included in the table.
MRI exams								1200		2000	67%	
Clinical Laboratory Services												
Anatomic Pathology	70155	13741	-80%	18013	31%	19451	8%	20770	7%	23196	12%	Note refers to negative growth rates for all lab disciplines listed below. The workload was realigned to the 2011 CHI values in Meditech in 2013-14 with an onsite consultant. This caused a drastic change to unit values. In 2014-15 there was a noticeable increase in complexity for Pathology. Hematology units also increased due to volume of requests (21%).
Clinical Chemistry	422486	249305	-41%	262709	5%	283675	8%	302918	7%	338294	12%	
Clinical Hematology	116335	60087	-48%	72576	21%	78368	8%	83684	7%	94457	13%	
Clinical Microbiology	81003	29798	-63%	29481	-1%	31834	8%	33993	7%	37963	12%	
Cytopathology	4541	1104	-76%	1218	10%	1315	8%	1404	7%	1568	12%	
Pre & Post Analysis	95306	99219	4%	105503	6%	113923	8%	121651	7%	135857	12%	
Transfusion Medicine	15842	7046	-56%	6110	-13%	6598	8%	7045	7%	7868	12%	
Pharmacy Services												
Units	688073	723047	5%	711546	-2%	802138	13%	903341	13%	1144629	27%	The increased percentage variance in 2034/35 can be explained by the increased utilization of pharmacotherapy of the older population.

OVERALL APPROACH TO BED PROJECTIONS

In terms of the overall approach to be projections the following methods were used.

Using 2014-15 base year data, forecasts were developed using Ministry of Finance population projections by subLHIN and 5-year age groups. Future beds are estimated at the LHIN target occupancy rates:

- Medical: 85 percent
- Surgical: 90 percent
- ICU / CCU: 70 percent
- Obstetrics: 75 percent
- Complex care: 90 percent

MACH Program leads and representatives reviewed forecasts under different assumptions for:

1. Market share
2. Admission rates
3. Acute days per admission
4. ALC days per admission

Utilization assumptions made include:

- ALC days were reduced to the LHIN target of 9.5% over 20 years
- Reducing low acuity ICU beds by factoring a lower admission rate
- Reducing low acuity ED visits as noted in Q#8
- Reducing rate of endoscopic procedures
- Reducing ambulatory care sensitive conditions for acute inpatient days