



The Health Care Management Group

25 August 2011

Ms. Angela Zangari
Acting Chief Financial Officer
Corporate Services
Niagara Health System
142 Queenston Street
St. Catharines, Ontario
L2R 7C6

re: HCM Letter Report dated 25 November 2010

Dear Angela:

This letter report replaces the HCM letter report dated 25 November 2010. Modifications have been made to protect the confidentiality of HCM Group's benchmarking methodology, data and information used, including the confidentiality of peer hospitals.

A set of operational efficiency performance benchmarking reports was recently sent to you, in electronic format, for your review. These benchmarking reports are for 2009/10 and 2010/11 Q2 (annualized) and use 2009/10 peer hospital best quartile performance targets, except for:

- Drug costs (kept at current actual due to differences in reporting drug costs among hospitals)
- Non-labour non-drug costs in direct functional centres [set at the median if the median is lower than actual NHS costs and there are significant costs in this category (for example, greater than \$30,000)]

A summary report, content of care reports for allied health and diagnostic areas, and skill mix analyses, were also provided. A few observations regarding the results are presented in this letter report.

Benchmarking Results Overall, in Context

The peer group that were used for benchmarking purposes was comprised of 23 large Ontario community hospitals plus 5 additional peers for benchmarking NHS's Urgent Care functional centre. *[The list of specific hospitals has been removed to protect their confidentiality.]*

The benchmarking performance reports at a functional centre level present a theoretical target savings of about \$32.4 million for 2009/10 and \$36.0 million for 2010/11 Q2 (annualized), at the peer best quartile¹. The total theoretical savings target for NHS equals 8.3% of net operating costs in 2009/10 and 9.0% for 2010/11 Q2 (annualized).

NHS Overall Benchmark Results

NHS Screening versus Other Clients

For other clients, the initial screening percent has varied between 5.9% and 19.3%, with a median screening of 12.0% as presented in the following table. Over the past three fiscal years (2008/09 - 2010/11 Q2) the initial screening percentage has varied between 6.2% and 18.4%, with a median screening of 11.3%. Note that the results for other clients below reflect a spectrum of general community and teaching hospitals². Also the mix of clients from one year to the next may vary.

Initial Benchmark Screening – Theoretical Savings Target Percentage

	Total	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Number	202	21	12	24	27	35	32	31	17	3
Mean	12.23%	13.34%	14.10%	11.76%	12.15%	11.77%	12.33%	12.31%	10.91%	11.97%
Median	12.00%	13.62%	13.84%	11.30%	12.50%	11.81%	11.85%	12.50%	10.50%	10.60%
Min	5.87%	9.45%	9.64%	5.87%	7.90%	6.60%	7.70%	6.20%	8.20%	9.00%
Max	19.29%	17.85%	19.29%	15.63%	17.17%	18.40%	18.20%	18.42%	15.30%	16.30%

NHS Screening versus Other Multi-Site Clients

For multi-site clients, the initial screening percent has varied between 5.9% and 19.3%, with a median screening of 12.0 % as presented in the following table. Over the past three fiscal years (2008/09 - 2010/11 Q2) the initial screening percentage has varied between 6.2% and 17.7%, with a median screening of 10.9%. Note that the peer group in the table below is not the same from one year to the next.

Initial Benchmark Screening – Theoretical Savings Target Percentage – Multi-Site

	Total	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	20001/11
Number	116	12	10	13	14	18	16	17	13	3
Mean	12.02%	13.91%	14.80%	11.51%	12.06%	11.04%	12.09%	11.56%	10.51%	11.97%
Median	12.00%	14.10%	14.82%	11.24%	12.50%	11.15%	12.31%	11.10%	9.80%	10.60%
Min	5.87%	9.45%	10.97%	5.87%	7.90%	6.90%	7.70%	6.20%	8.20%	9.00%
Max	19.29%	17.85%	19.29%	14.78%	15.50%	15.30%	18.20%	17.70%	15.30%	16.30%

NHS Screening versus NHS Peers

For clients that are being used as peers for NHS, the initial screening percent has varied between 5.9% and 19.3%, with a median screening of 11.9% as presented in the following table. Over the past three fiscal years (2008/09 - 2010/11 Q2), the initial

¹ Based on 2009/10 peer performance benchmarking at the best quartile performance levels for labour and median performance levels for non-labour. This methodology is consistent with operational reviews.

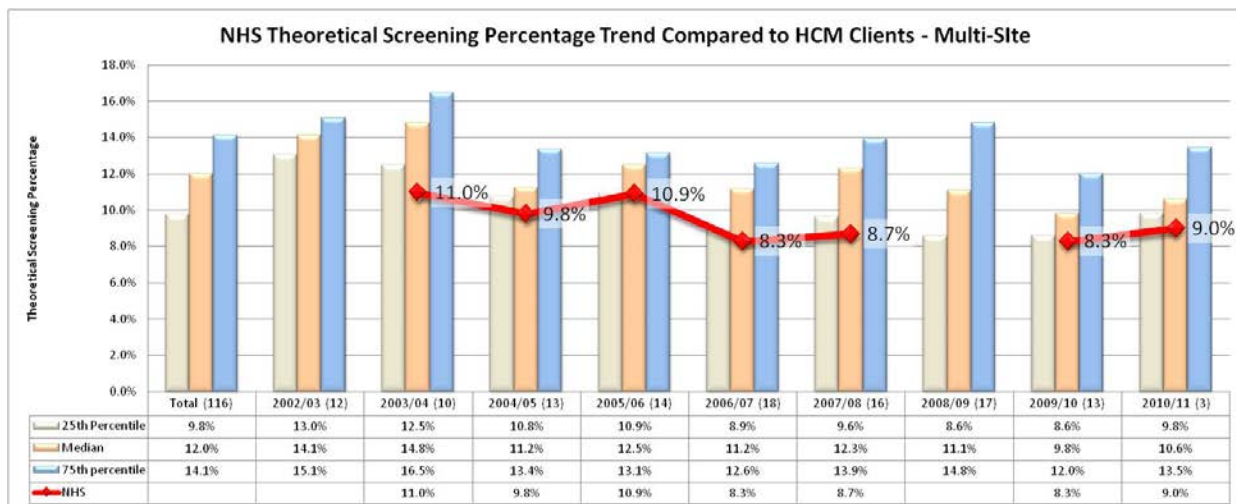
² CCC/Rehabilitation and specialty hospital screening results are excluded

screening percentage has varied between 7.12% and 18.4%, with a median screening of 11.75%. Note that the peer group in the table below is not the same from one year to the next.

Initial Benchmark Screening – Theoretical Savings Target Percentage – NHS Peers

	Total	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Number	98	15	8	12	14	16	13	10	7	3
Mean	12.07%	13.27%	14.20%	11.86%	11.53%	10.91%	11.51%	12.22%	12.09%	11.97%
Median	11.86%	13.62%	13.84%	12.10%	11.70%	11.22%	10.30%	11.95%	12.00%	10.60%
Min	5.87%	9.45%	10.97%	5.87%	7.90%	6.60%	7.90%	7.12%	8.30%	9.00%
Max	19.29%	16.81%	19.29%	15.10%	14.50%	14.68%	16.65%	18.42%	15.30%	16.30%

NHS's theoretical screening percentages have tended to be better than the initial screening results of most other HCM clients as presented in the following graph. Since 2006/07, NHS's theoretical screening percentages have been better than over 75% of all HCM client results.



Theoretical versus Achievable Savings

Past clients who have pursued opportunities to improve cost efficiencies have identified plans to achieve 20 - 52% of the best quartile theoretical screening savings potential, with a median/mean achievement of 36% as presented in the following table.

Achievable Savings – Percentage of Theoretical Target

	Total	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Number	38	10	4	4	4	7	7	2
Mean	36.10%	43.23%	38.62%	34.72%	28.48%	30.07%	38.04%	27.77%
Median	35.85%	44.59%	39.12%	34.85%	25.50%	29.80%	42.60%	27.77%
Min	19.54%	33.58%	34.19%	28.11%	22.50%	22.60%	26.30%	19.54%
Max	51.77%	51.77%	42.06%	41.08%	40.42%	36.90%	49.10%	36.00%

These improvement strategies represent initiatives from across the organization, including savings in areas that were identified as having no theoretical savings target

(already in the best quartile) and new revenue/recovery opportunities. We have also seen that the magnitude of actual (not theoretical) savings opportunity for clients has lessened over the past few years, particularly for those clients who continue to strive for operating efficiencies and who typically are already near the lower end of the “theoretical savings percentage” range. Between 2006/07 and 2008/09 the median/mean achievement has been about 33% of the of the best quartile theoretical screening savings potential.

[A chart and brief discussion have been removed as they disclose a proprietary HCM methodology and are very complex (typically require much discussion to explain and understand.)]

Based on our experience with other clients, NHS could expect to achieve savings and revenues of \$6.5 - 13.0 million for 2009/10 and \$7.2 – 14.4 million against this year’s budget. This equates to 20% - 40% of the theoretical savings, per savings realized by other clients over the past few years, and assumes that NHS would go through the same type of organization-wide operational improvement exercise that other clients have undertaken. Note that a review of the reports and underlying data may lead to some data adjustments for comparability, and corresponding adjustment(s) in savings targets. From the functional centre reports, there appears to be opportunity for cost savings and/or increased revenue opportunities.

Content of Care Analyses

The allied health content of care analyses provide another perspective on benchmarking (versus the productivity-based measure of hours per attendance). These analyses compare “how much” therapy NHS is providing compared/relative to the peers. The reported patient care workload units are used to allocate worked hours by the type of patient (acute, outpatient, etc.). Comparisons with peers focus on therapy hours per patient day and the percentage of resources devoted to outpatient care. These reports indicate the following:

- In 2009/10 and in 2010/11 Q2 Respiratory Therapy, Social Work and Psychology's outpatient service percentages are above the 75th percentile. Speech Language Pathology, Pastoral Care and Recreation's outpatient service percentages are above the median.
- In 2009/10 the overall hours per acute patient day are less than the peer minimum. In 2010/11 Q2 they are less than the 25th percentile and are close to the minimum.
- In 2009/10 and 2010/11 Q2 the overall hours per mental health patient day are above the 75th percentile.
- In 2009/10 the overall hours per complex continuing care patient day are less than the 25th percentile and in 2010/11 Q2 they are just above the 25th percentile.
- In 2009/10 the overall hours per emergency visit were just below the median. In 2010/11 Q2 they are between the 25th percentile and the median. In 2009/10 and

for 2010/11 Q2 the overall Respiratory Therapy and Pharmacy's hours per emergency visit are above the median.

Similarly, the diagnostic services content of care analyses provide another perspective on benchmarking (versus the productivity-based measure of hours per workload unit), and may provide useful information on utilization of diagnostic services (how much work is ordered, versus how efficiently the work is performed). These reports indicate the following:

- In 2009/10 and 2010/11 Q2 most areas' outpatient service percentages are above the peer median. In 2009/10 Main Lab's outpatient percentage is less than the median and in 2010/11 Q2 it is above the peer maximum. Most of the other areas are near/above the median.
- In 2009/10 the overall diagnostic hours per acute patient day are just below the median and in 2010/11 Q2 they are less than 25th percentile. Radiology and Diagnostic Cardiology are above the median and close to the 75th percentile.
- In 2009/10 the overall diagnostic hours per mental health patient day are above the 75th percentile and in 2010/11 Q2 are slightly below the 75th percentile.
- In 2009/10 and in 2010/11 Q2 the overall diagnostic hours per complex continuing care patient day are less than the peer 25th percentile.
- In 2009/10 and in 2010/11 Q2 the overall diagnostic hours per emergency visit are less than the peer 25th percentile. In 2009/10 Clinical Lab, Radiology and Diagnostic Cardiology are above the 25th percentile. In 2010/11 Q2 Radiology and Diagnostic Cardiology are above the 25th percentile

Summary

The results of the performance benchmarking exercise indicate that there are opportunities for cost savings and/or increased revenue opportunities. Please feel free to contact me [specific contact information removed] with any questions or follow-up needs.

Very truly yours,

A handwritten signature in black ink that reads 'Earl Bardswich'.

Earl Bardswich
President, HCM Group, Inc.