

## **HISA Submission to the Boston Consulting Group NEHTA Review**

**Health Informatics Society of Australia**

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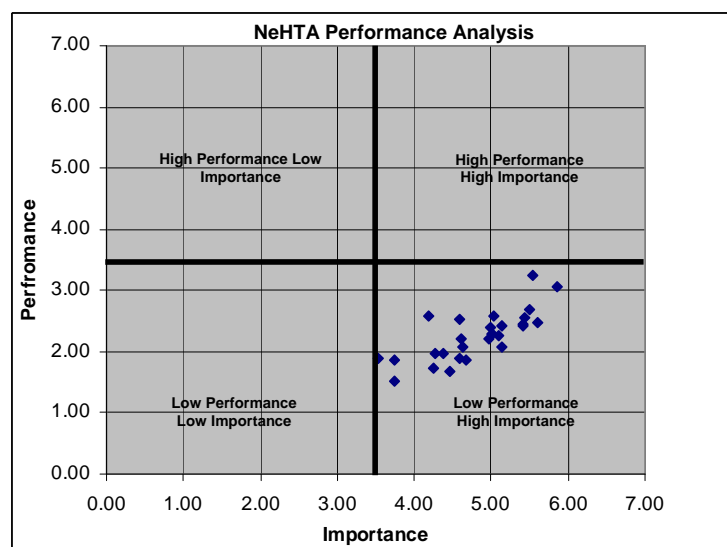
## Summary

The Health Informatics Society of Australia (HISA) undertook an opinion survey of its members and supporters in response to a request for comment from the Boston Consulting Group (BCG) who were commissioned to evaluate the performance of NEHTA and the factors driving that performance. This paper provides the results of that survey and a commentary based on the experience of HISA's Board and Executive.

The survey looked to capture opinions on both the perceived importance of the aims for which NEHTA was established, their subsequent work program and the perceived performance in achieving these in the time since NEHTA's establishment. This was done both semi-quantitatively and by written responses to open questions.

An invitation to complete an electronic survey was sent by email to 1,390 members and supporters of HISA. The survey was conducted over a 10 day period from the 10th to the 20th of July 2007. At the close of the survey period 189 responses had been received of which 155 were complete. The survey sample comprised of people with a broad spread of occupations, workplace types and sizes.

For the quantitative component mean performance scores were plotted against mean importance scores and this is shown in the Figure.



**All of the mean scores were in the high importance and low performance quadrant. There is a consistent opinion expressed by the respondents – that is the work is considered important but the performance is not meeting expectation.**

There is however a trend in the data showing that there is a matching of perceived performance to perceived importance albeit with low absolute performance scores. Further analysis using the rank of the scores was undertaken to identify outliers to help with the identification of the most likely opportunities for improvement. 388 written responses to open questions were also provided. These are grouped using affinity diagramming and the results provided.

That NEHTA's performance is not matching expectation is the major and consistent outcome of this comprehensive and broad-based opinion survey evaluating the first two and half years of NEHTA's operation. It cannot be easily dismissed as a factional view. This is a consistent view from informed stakeholders whose support will be required to achieve the high level objectives for health system change that were intended from NEHTA coming into existence.

It would be better to resolve the identified and important issues around engagement and style within the existing structures to avoid a repeat of the hiatus that occurred with the formation of NEHTA.

There is close co-operation between HISA and the Australian College of Health Informatics (ACHI) with all ACHI Fellows also members of HISA. There is a strong view from the membership of both organisations that Australia is not moving fast enough to improve health information systems and that Australia lacks an agreed and resourced plan to address this to realise the benefits that are now becoming well accepted internationally. HISA stands ready and able to contribute and support the development of this national plan.

## Introduction

The Health Informatics Society of Australia (HISA) undertook an opinion survey of its members and supporters in response to a request for comment from the Boston Consulting Group (BCG) who were commissioned to evaluate the performance of NEHTA and the factors driving that performance. This paper provides the results of that survey and a commentary based on the experience of HISA's Board and Executive.

### *The Health Informatics Society of Australia (HISA)*

HISA is a scientific society established in 1993. It provides a national focus for health informatics, its practitioners, industry and users. It advocates on behalf of its members and provides opportunities for learning and professional development in health informatics. One of the education activities of the Society is the annual National Conference which attracts around 1000 delegates and features a sizeable trade show and the country's only interoperability demonstration.

HISA is the national affiliate of the International Medical Informatics Association and this year hosts the triennial meeting of that organisation (Medinfo). Scientific, standards and policy leaders from around the world will gather in Brisbane in August 2007. Around the same time HISA is also host to the First World Congress in Pathology Informatics, the Third International Socio Technical Informatics Conference and the First World Nursing Informatics Leadership Conference.

### *The Survey*

The survey sampled a broad group of Australian healthcare providers, health informatics practitioners and those with direct clinical and operational involvement in the health system. Respondents were asked to rate both importance and performance for NEHTA's constitutional objectives and their internal work plan. Respondents were also asked to provide written comments in response to more open questions to provide further insight into their assessment of NEHTA's work.

The survey looked at NEHTA's performance from two perspectives. The first looked at the absolute performance of NEHTA. That is, given the two and a half years NEHTA has been in operation, what is the perception of the eHealth community of NEHTA's performance on its published commitments? The second analysis looked at the alignment of the importance of the activities carried out by NEHTA's to the respondent's perception of their performance. That is, given the resources they possess, is NEHTA prioritising its work in accordance with the priorities of the general Australian eHealth community, and consequently what are the areas in which they are under performing and areas in which they are over performing.

## Methodology

An invitation to complete an electronic survey was sent by email to 1,390 members and supporters of HISA. The survey was conducted over a 10 day period from the 10th to the 20th of July 2007. At the close of the survey period 189 responses had been received of which 155 were complete.

The survey invitation process was separated from the actual survey to ensure that survey responses could not be matched to an individual and yet it was possible to monitor access to the site to ensure the survey was not biased from any person providing multiple responses.

### *Survey Design*

The survey looked to capture opinions on both the perceived importance of the aims for which NEHTA was established, their subsequent work program and the perceived performance in achieving these in the time since NEHTA's establishment. The survey instrument is shown at Appendix 1.

A semi-quantitative approach was taken for a section of the survey. Respondents were asked to rank both importance and performance using a 7 point scale, an extension of the more commonly used 5 point Likert scale. Previous work has shown this to be the least number of points to approximate a continuous scale allowing the use of statistics based on a population of continuous data.

Prompts were developed to address the request for comment from BCG. Those around aims were drawn directly from the NEHTA constitution and NEHTA's published work plan as derived from presentations by Karen Gibson (5 June 2007): "E-Health - Global Trends and Local Action" and by Dr Ian Reinecke (17 May 2007) HIMSS AsiaPac 07: "Accelerating Healthcare Reform". Questions relating to NEHTA's constitution were derived from the relevant sections of the NEHTA constitution as supplied by the Boston Consulting Group. A short series of questions was added relating specifically to NEHTA's consultation and communications.

The semi-quantitative component of the survey was supplemented by the addition of open questions allowing a written response. The prompts used were:

- *Please provide any comments you have on the structure and governance of NEHTA. Issues you may want to think about here are:*
  - *The composition of the board. Is there sufficient representation from, medical professionals or healthcare managers actively involved in the healthcare system, or technologist and systems vendors designing and deploying these systems?*
  - *Clearer definition of the role and relationship of AHIC, Clearer definition of the role and relationship of DoHA, Clearer definition of the role and relationship of AHMC*
- *What has NEHTA been successful at doing?*
- *What has NEHTA been unsuccessful at doing?*
- *Please let us know any other comments that you think are important in putting together our submission on NEHTA's performance?*

The text responses to these questions were grouped using an affinity diagramming technique and mind-mapping. The themes were then named. The outcome is shown in the following section.

## Results and Analysis

### *Demographics*

The survey cohort comprised current HISA members plus delegates to HISA's annual Health Informatics Conference (HIC) as well as past attendees to HISA's annual Aged Care conference for the past 3 years (1390 potential respondents).

Questions were asked to allow categorisation of respondents according to their roles and places of work. Analysis of these occupational demographics showed a contribution from most major segments of the health and health informatics workforce.

Results from the question around role were:

Doctors	13%
Nurses	13%
Healthcare Managers	12%
Academics	13%
Allied Health Professionals	5%
Other Healthcare	4%
Health IT Technologist	50%
Other	21%

Multiple responses were allowed to these questions and so the total of responses (131%) indicates many see themselves with multiple roles. There were respondents from all of the role options with a good spread. Perhaps unsurprisingly, the role that most respondents identified with was that of Health IT Technologists, but there was good representation from doctors, nurses, academics and health care managers. While 50% of respondents reported being Health IT Technologists only 28% were from a healthcare systems vendor indicating a strong representation from the technologists within the healthcare workplace. This is reinforced by the majority reporting that they come from a healthcare establishment. Those from Government departments and service suppliers are however also well represented in the sample.

Results from the question around place of work were:

I work for a university	14%
I work for a healthcare establishment	50%
I work for a healthcare systems vendor	15%
I work for a government department	14%
I work for a healthcare services supplier	15%
Other	19%

Results from the question around organisation size were:

Less than 10	16%
11 to 50	17%
50 to 200	19%
200 to 1000	8%
Greater than 1000	50%.

As in the other questions there was a spread of respondents from all sized organisations although most came from large ones.

In summary the survey sample comprised of people with a broad spread of occupations, workplace types and sizes. This lays the foundation for an analysis which is broadly representative of the Australian healthcare community and unlikely to be biased with an over representation of any one specific group.

#### *Mean Scores of Performance vs Importance*

All surveys were included in the analysis. Mean and standard deviation of the scores for each prompt is shown in Table 1. The standard deviation of the performance scores indicates a wide variation of results but most scores nevertheless fall in the high importance low poor performance quadrant. This was a consistent profile over most results and is easily observed from reviewing the raw data scores found in Appendix 1.

Question	Average Importance Score	Std Dev	Average Performance Score	Std Dev
<b>Question 4:</b> Provide the critical standards required to support connectivity and interoperability of electronic health information systems across Australia	5.85	0.73	3.06	1.68
<b>Question 5:</b> Provide the infrastructure, software and systems to support connectivity and interoperability of electronic health information systems across Australia	5.02	1.77	2.28	1.80
<b>Question 6:</b> Provision of clinical data standards and terminologies for health information in clinical service delivery	5.55	0.95	3.24	1.57
<b>Question 7:</b> Provision of patient, provider and product/service standards and directories/indexes that provide unique identification.	5.60	0.88	2.48	1.69
<b>Question 8:</b> Identification standards and data structure for the capture and storage of patient/provider, product and services information	5.13	1.15	2.43	1.74
<b>Question 9:</b> Provision of a product and service directory	4.26	1.47	1.97	1.62
<b>Question 10:</b> Provision of consent models governing the collection and handling of eHealth Information	5.14	1.16	2.06	1.58
<b>Question 11:</b> Provision of Electronic Health Record Standards	5.44	1.10	2.56	1.84
<b>Question 12:</b> Provision of technical integration (interoperability) standards	5.51	1.01	2.70	1.72
<b>Question 13:</b> Provision of supply chain efficiencies (explore options such as common forms, of procurement, standard contracts and common purchasing processes)	3.75	1.40	1.86	1.60

Table 1: Mean and standard deviation of importance and performance scores for each question.

Question	Average Importance Score	Std Dev	Average Performance Score	Std Dev
<b>Question 14:</b> Provision of user authentication and access control to ensure compliance with privacy laws and consent models	5.02	1.23	2.28	1.75
<b>Question 15:</b> Provision of consent models governing the collection and handling of eHealth Information	5.10	1.17	2.25	1.68
<b>Question 16:</b> Provision of EHR secure messaging and information transfer including a national security model for messaging and information transfer	5.41	1.02	2.44	1.80
<b>Question 17:</b> Provision of a knowledge center providing knowledge sharing and expert advice	4.61	1.36	2.20	1.77
<b>Question 18:</b> Encourage and facilitate the health information industry reform and technology reform to meet interoperability and implementation objectives.	5.42	1.02	2.43	1.88
<b>Question 19:</b> Analyse the benefits of eHealth implementation in Australia	4.58	1.19	2.54	1.59
<b>Question 20:</b> Establish appropriate standards for eHealth implementation.	4.99	0.99	2.38	1.66
<b>Question 21:</b> Create the appropriate supporting infrastructure for eHealth in Australia	4.58	1.51	1.88	1.67
<b>Question 22:</b> Develop national eHealth policies	4.63	1.33	2.08	1.77
<b>Question 23:</b> Enabling the unique identification of all individuals and healthcare providers across Australia	4.98	1.00	2.22	1.67
<b>Question 24:</b> Exchanging clinical information electronically, using a common language with consistent terms, descriptions and formats.	5.03	0.89	2.58	1.73
<b>Question 25:</b> Identifying the greatest benefits for least cost, in the shortest time, with the least risk.	4.24	1.38	1.72	1.55
<b>Question 26:</b> Designing a national system of shared electronic health records for practitioners and consumers.	4.66	1.44	1.86	1.68
<b>Question 27:</b> Building a national product catalogue and e-procurement solution to drive efficiency across the public health sector supply chain.	3.53	1.48	1.89	1.65
<b>Question 28:</b> The breadth of the engagement process (number and variety of organisations engaged)	4.37	1.06	1.96	1.68
<b>Question 29:</b> The quality of the material presented by NeHTA	4.18	0.91	2.59	1.64
<b>Question 30:</b> The readiness of NeHTA to listen to and fairly evaluate feedback	4.46	0.86	1.68	1.89
<b>Question 31:</b> The outcomes that have been achieved as a result of the consultation	3.75	0.84	1.52	1.57

Table 1 (cont): Mean and standard deviation of importance and performance scores for each question.

The mean performance scores were plotted against the mean importance scores and this is shown in Figure 1.

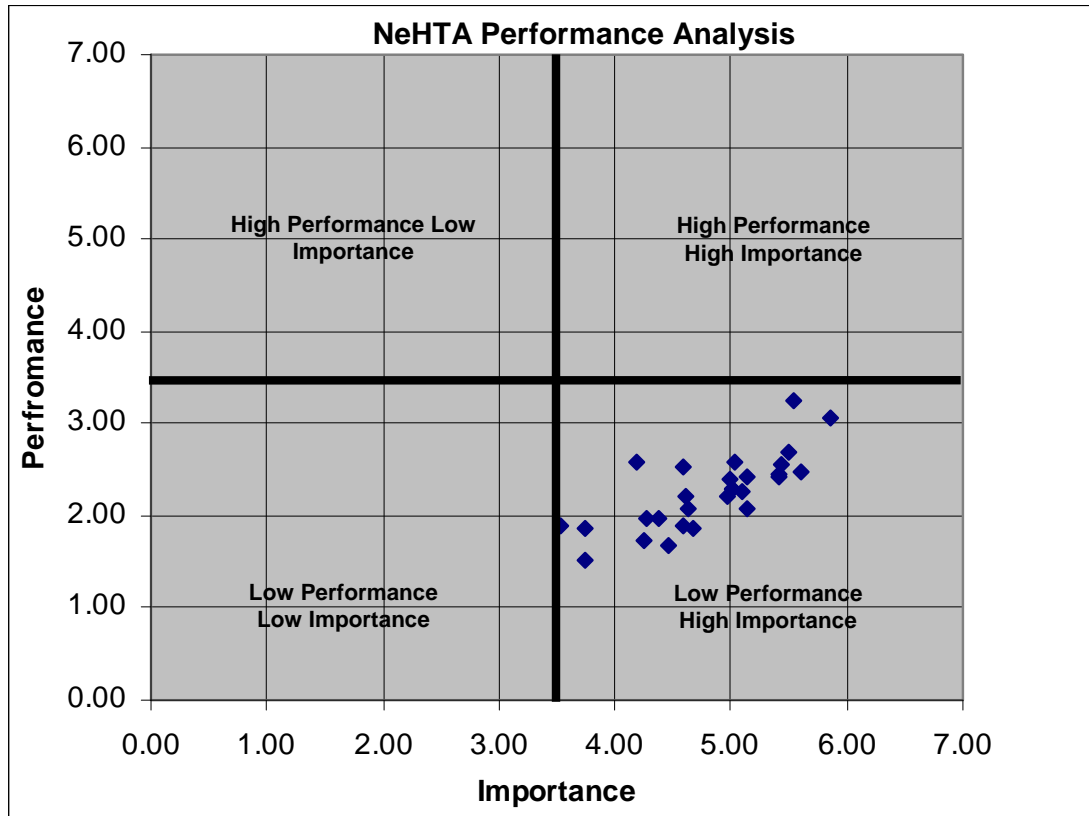


Figure 1 - Mean performance score versus mean importance score for questions relating to performance against constitutional and work plan objectives for NEHTA.

**All of the mean scores were in the high importance and low performance quadrant. There is a consistent opinion expressed by the respondents – that is the work is considered important but the performance is not meeting expectation.**

There is however a trend in the data showing that there is a matching of perceived performance to perceived importance albeit with low absolute performance scores.

#### *Rank of Mean Scores of Performance vs Importance*

Further analysis using the rank of the scores was undertaken to help with the identification of the most likely opportunities for improvement. If the observed matching of performance to importance was completely aligned then, when plotted as ranks, there would be close clustering of issues to a 45 degree line from the origin. The result of this analysis is shown in Figure 2.

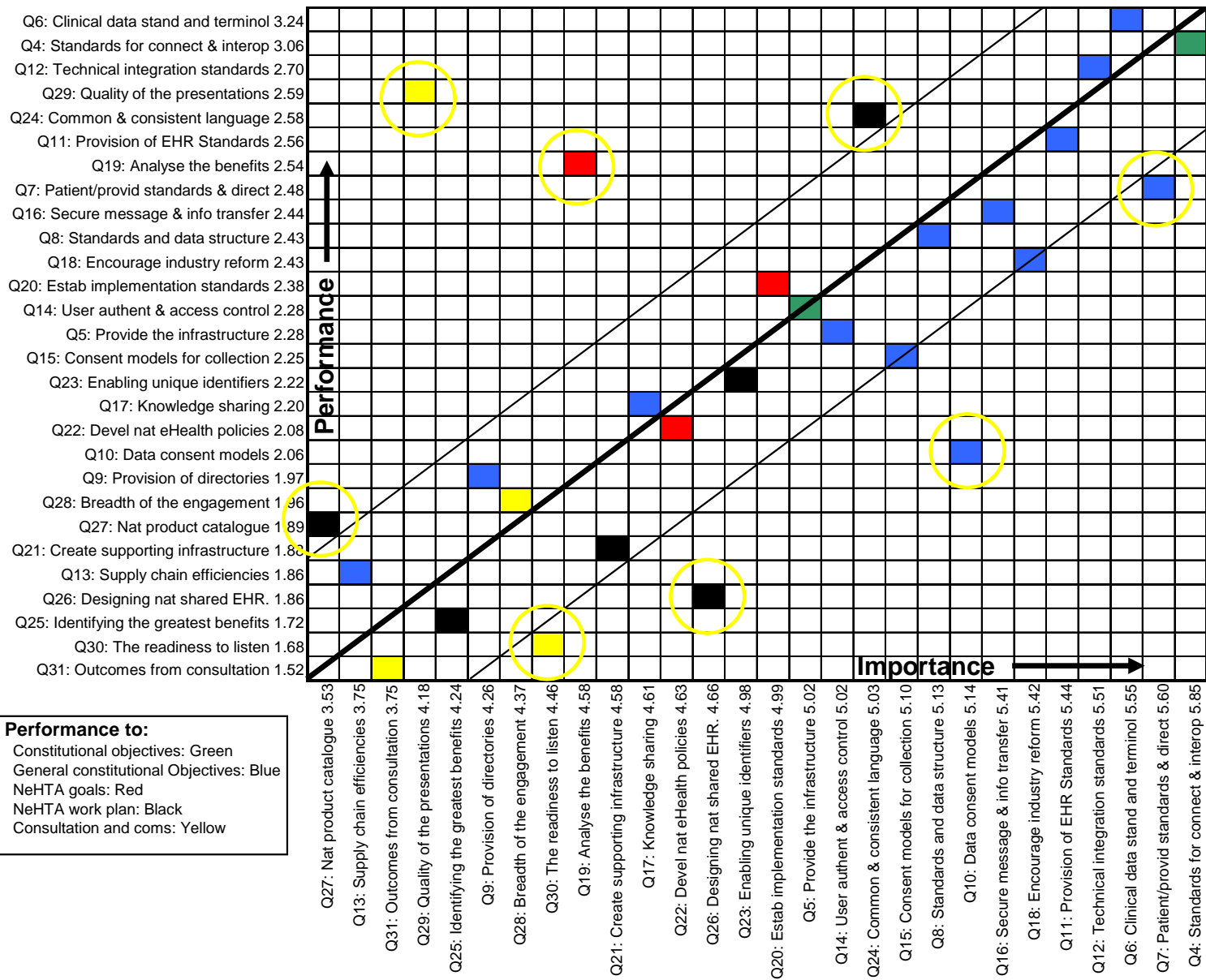


Figure 2 - Rank of mean importance and performance scores showing outliers.

If we choose to apply limit lines and look at the outliers this can be helpful in looking where to focus improvement activities. Obviously using this technique the threshold for the limit lines can be set closer or further away from the 45 degree line resulting in more or fewer outliers. We have used the eye to establish limits that identify 8 areas for attention from the 28 parameters. There are 4 that might be considered issues where there is relative over-performance and 4 where it might be considered relative under-performance.

### *Opportunities for Improvement – Relative Under-Performance*

In the order of how far from alignment the issue is (furthest to closest), the outliers with relative under-performance were:

10	Provision of consent models governing the collection and handling of eHealth Information
26	Designing a national system of shared electronic health records for practitioners and consumers
7	Provision of patient, provider and product/service standards and directories/indexes that provide unique identification
31	The outcomes that have been achieved as a result of the consultation

The highest importance outlier was question 7 regarding the provision of standards and directories. This is an interesting result, given that NEHTA's work on standards has been listed as one of their success areas in the textual analysis, particularly their work on licensing SNOMED. However, this response, probably highlights an important underlying issue in all the alignment analysis, that is, while there is support for NEHTA in specific areas, this support is in a context of deep disappointment in terms of overall performance. There was also considerable feedback on the importance and lack of suitable progress in the area of directories, which could have also influenced the respondent's ranking of this result.

Privacy (Question 10) is another significant area where respondents felt that NEHTA was not suitably prioritising their activities. A number of textual responses emphasised the importance of clear, accepted and effective privacy regulations to the success of any eHealth program. If the stakeholders do not trust the security and appropriate application of the information then they are unlikely to effectively use the systems that support that information.

The narrow engagement of NEHTA to the broader health community is probably the driving force for the low performance of Question 26, "Designing a national system of shared electronic health records for practitioners and consumers". This issue of narrow engagement was probably the most prevalent issue raised in the textual responses with 71 responses referring to this issue from 189 survey respondents. The underperformance in this area may also relate to the fact that NEHTA has been quite reticent about the nature of its plans in this area.

The final under-performing outlier was question 30, the readiness of NEHTA to listen and fairly evaluate feedback. This received one of the lowest scores of the evaluation. This feeling is reflected in a whole series comments around the leadership style of the organisation and especially how NEHTA engages with industry.

### *Opportunities for Improvement – Relative Over-Performance*

While over performance may not be considered bad, in the case of an organisation with limited resources, it often means that more important issues (of greater benefit to Australia) could be completed more effectively if these resources were better utilised.

In the order of how far from alignment the issue is (furthest to closest), the outliers with relative over-performance were:

29	The quality of the material presented by NEHTA
19	Analyse the benefits of eHealth implementation in Australia
24	Exchanging clinical information electronically, using a common language with consistent terms, descriptions and formats
27	Building a national product catalogue and e-procurement solution to drive efficiency across the public health sector supply chain

Of these four issues it was the quality of the presentation materials which was the most significant outlier. This result was supported by a high number of comments in the textual analysis focusing on the number of published documents which did not contain useful information or information that was not already well known.

In regard to question 19, "analysing the benefits of eHealth implementation", one can only surmise that the respondents have not valued the work done by NEHTA due to the lack of detailed information pertaining to this model, its structure and assumptions, as well as the lack of detailed results published from using this model. Again this could be reflected back to the general lack of engagement from NEHTA that respondents have expressed.

The fact that question 24, "Exchange clinical information electronically, using a common language with consistent terms, descriptions and formats" was listed as an over performance outlier was curious. A number of the questions ranking higher in importance and better aligned than this were strongly associated with the delivery of standards, perhaps respondents felt that the need of the foundation standards were more important and required a greater focus from NEHTA.

The final outlier, was in fact the lowest ranking "Importance" question. This was question 19 "Building a national product catalogue and e-procurement solution to drive efficiency across the public health sector supply chain", and probably reflects more staging issue than anything else, i.e. that there are a number of more critical issues that need to be attended to before this, and perhaps the fact that there are a number of existing commercial suppliers in this area supporting a vast array of industries. It is also possible that many of the respondents of the survey are more clinically focused than interested in back room operational issues such as supply chain improvement.

### *Written Responses to Open Questions*

Free-form written responses were invited in four areas. They were around the structure and governance of NEHTA; NEHTA's successful activities; NEHTA's unsuccessful activities; and other comments. In total there were 388 (sometimes quite lengthy) comments. This is unusual for a survey such as this and previously has been taken as an indication of a level of dissatisfaction and especially with not being heard.

The result of analysis using affinity diagramming is shown in Figure 3. The numbers in the boxes are the count of responses categorised under each theme. There was considerable overlap in responses across the four question areas, with large numbers of responses for engagement and leadership issues appearing in multiple places.

In regards to the question on structure and governance, the respondent's feedback spanned both the Board and the NEHTA organisation itself. Clearly in regard to responses pertaining to the NEHTA Board, the key issue was the narrow breadth of skills. This was not a reflection of the competence of the people currently serving on the Board, but more a recognition of breadth of the task required to transition Australia to a new eHealth environment and the consequent need to have representatives on the Board that are reflective of the major stakeholder groups that are part of this transition.

The other very strong opinion amongst the respondent group was a feeling that NEHTA and the Board were not appropriately engaging the Australian eHealth Community. While respondents often acknowledged the difficulty and complexity of the task, they were dismayed at the lack of interaction and utilisation of the broad range of skills that are within the Australian eHealth community. The final major "structure and Governance" theme was the absence of a clearly articulated national eHealth strategy. It was felt that this was an important catalyst of the eHealth diffusion process and so vital to achieving NEHTA's goals.

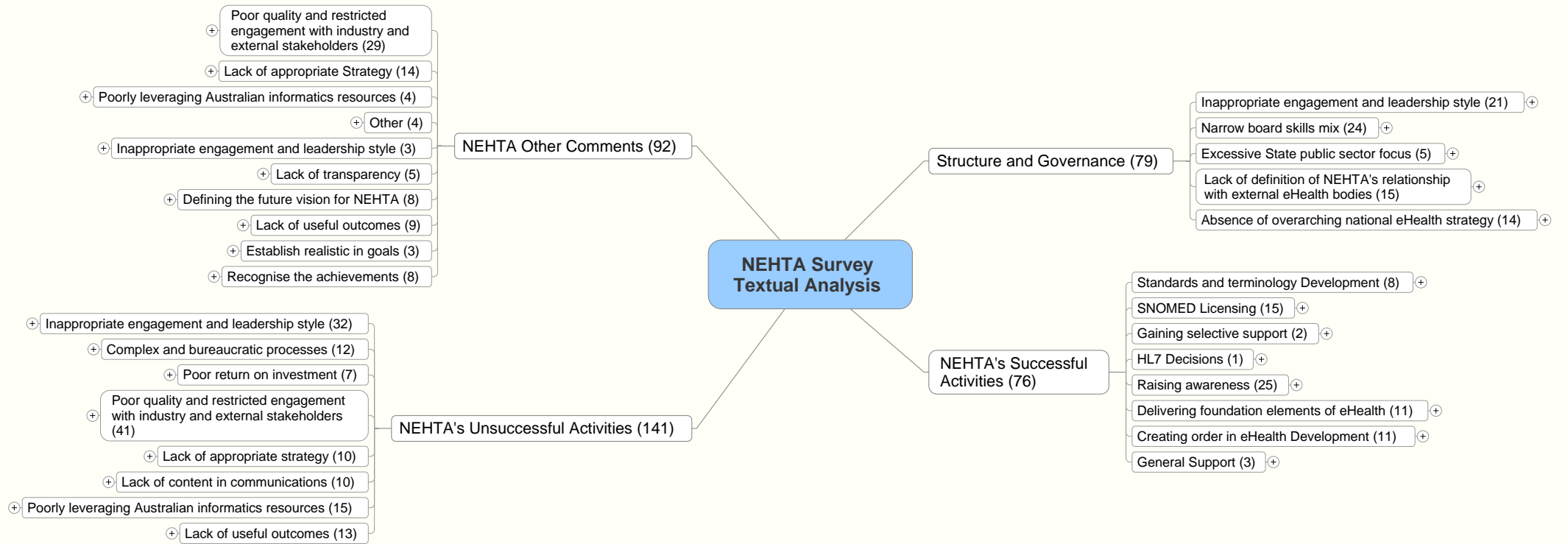
In terms of NEHTA's successful activities, their work around standards and SNOMED licensing were clearly seen as major achievements. In addition, there was strong positive response around their role in raising the awareness of eHealth in the broader health, business and consumer environments. Also the issue of creating order in the complex and dynamic health environment was raised as an important achievement.

Of the questions asked in this section most responses came in response to the question around NEHTA's unsuccessful activities. There were two themes that dominated the responses here.

The first was the poor quality and restricted engagement of industry and the external stakeholders by NEHTA. This reflected concerns that the expertise within the Australian eHealth community, at a clinical, vendor and health manager level, had not been properly engaged by NEHTA. As a result, the process is in jeopardy of not reflecting the operational needs of Australian eHealth. In an area such as health, this lack of operational knowledge can have critical and even life endangering consequences. Consequently there is a concern that this almost "academic" approach of NEHTA could lead to a complex, costly and possibly unsafe systems and processes being implemented.

The second major theme to come out of this question was the inappropriate engagement and leadership style that is being displayed by NEHTA. While a number of the responses clearly reflect a response to the culture and management style of senior managers within NEHTA, the major concern being expressed is that this culture will cripple NEHTA's chances of bringing together all the disparate elements within the Australian eHealth community in the way required to sustainably deliver on NEHTA's objectives. Other themes amongst the comments were the lack of content in the communications, the cost and lack of useful outcomes, the poor return on investment and the apparently complex and bureaucratic processes within NEHTA.

The final question asked for any other comments. This again generated strong responses on the NEHTA's industry engagement and its leadership style themes. Further management style issues raised in this response were the lack of transparency of the organisation and the lack of an appropriate strategy and defined vision for the organisation (including a lack of realistic goals). Importantly, in the responses to this question there was a group who want the complexity of the task undertaken by NEHTA to be recognised and that it was important to realise that NEHTA was only partly through an extensive program of work, and so people's judgement of progress needs to take this into account. Also we need to celebrate more of NEHTA's successes rather than focusing on their short comings.



## Conclusions

That NEHTA's performance is not matching expectation is the major and consistent outcome of this comprehensive opinion survey evaluating the first two and half years of NEHTA's operation.

The survey is well-designed and broad-based with a good response rate and with significant effort provided by the respondents to consider and convey the issues and to provide suggestions for improvement. It cannot be easily dismissed as a factional view. This is a consistent view from informed stakeholders whose support will be required to achieve the high level objectives for health system change that were intended from NEHTA coming into existence.

Issues related to the level and manner of engagement with the health community and the style of operation and leadership were repeatedly identified. The difficult task that NEHTA has is to take the highly intelligent and independently minded members of the Australian healthcare system and get them to do something that will often mean more work, and deliver little value directly to them, at least in the short term. The hallmark of leadership in this type of environment is the ability to engage, listen and bind this diverse group together with a common purpose.

This is the critical task for NEHTA, the task at which, according to the feedback from this survey, it is not achieving. It is not really a question of technology, most of the critical technology problems have been solved to a large degree. It is an ability to engage the Australian healthcare community in an agreed plan and involve them in the standardisation process, ensuring they are the final owner and driver of the outcome.

Australia does not have the resources to engage in a UK, NHS style "top down" approach to delivering eHealth. Nor would it be the best use of those resources if we had them. We need to intelligently leverage the rich resources that we have, engage with vendors and clinical participants, decide what problems need to be addressed locally and what nationally, and most importantly bring the Australian eHealth community along on the journey.

There is no doubt that there are some talented and open people within NEHTA, but their contributions appear to be blunted by isolation from the broader Australian eHealth Community. The results of this survey are starkly clear, in spite of the talent within NEHTA, it is not performing to community and stakeholder expectations. It needs to better engage, listen, and leverage the broader talent pool in Australian eHealth. In doing this, it needs to be a participant and in some cases to lead in galvanizing both the eHealth and broader healthcare communities together in the common goal of delivering a safer and more efficient healthcare system for Australia through the application of eHealth systems and processes.

It would be better to resolve these important issues around engagement and style within the existing structures to avoid a repeat of the hiatus that occurred with the formation of NEHTA.

There is close co-operation between HISA and the Australian College of Health Informatics (ACHI) with all ACHI Fellows also members of HISA. There is a strong view from the membership of both organisations that Australia is not moving fast enough to improve health information systems and that Australia lacks an agreed and resourced plan to address this to realise the benefits that are now becoming well accepted internationally. HISA stands ready and able to contribute and support the development of this national plan.

## Appendix 1 – Survey Results by Question

# Zoomerang Survey Results

NeHTA Review Survey

Response Status: Completes and Partial

Filter: No filter applied

Jul 20, 2007 1:28 PM PST

1		
<b>Tell us About Yourself</b>		
<b>This survey is designed to maintain your privacy, it does not record your email address or any identifying details. So, to allow us to better analyze the results we would like you to answer a few questions about yourself. Just click on the boxes which best fit your background:</b>		
I am a doctor	24	13%
I am a nurse	23	13%
I am a healthcare manager	21	12%
I am an academic	23	13%
I am an allied health professional	9	5%
I am a healthcare professional in other areas	8	4%
I am a health IT technologist	91	50%
Other, please specify	38	21%

2		
<b>Tell us About Yourself</b>		
<b>Could you now tell us about the type of organisation that you work for. Click on the box which best fits your organisation:</b>		
I work for a university	26	14%
I work for a healthcare establishment	50	28%
I work for a healthcare systems vendor	28	15%
I work for a government department	26	14%
I work for a healthcare services supplier	27	15%
Other, please specify	35	19%

3		
<b>Tell us About Yourself</b>		
<b>Just one more question about the size of the organisation that you work for. Click on the box which best describes the number of staff in your organisation:</b>		
Less than 10	29	16%
11 to 50	31	17%
50 to 200	19	10%
200 to 1000	14	8%
Greater than 1000	91	50%



## Performance to General Constitutional Objectives

NeHTA's constitution contained a general statement on its overall objectives. In the following 2 questions we would like you to rate, on a 1 to 7 scale, NeHTA's performance on these objectives and also your opinion on the importance of these objectives:

Highest number = highest importance/performance

### 4. Provide the critical standards required to support connectivity and interoperability of electronic health information systems across Australia

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	0 0%	0 0%	0 0%	3 2%	16 9%	58 32%	96 53%	8 4%
Performance	13 7%	23 13%	43 24%	24 13%	27 15%	12 7%	13 7%	26 14%

### 5. Provide the infrastructure, software and systems to support connectivity and interoperability of electronic health information systems across Australia

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	12 7%	6 3%	4 2%	14 8%	33 18%	39 22%	66 36%	7 4%
Performance	46 25%	32 18%	25 14%	21 12%	12 7%	7 4%	9 5%	29 16%

## Performance to Specific Constitutional Objectives

In NeHTA's constitution they were required to research, develop and implement a range of national health information projects. In the following 13 questions we have listed each of these projects and we ask you to rate, on a 1 to 7 scale, NeHTA's performance on each project and also your opinion of the importance of each of these projects:

Highest number = highest importance/performance

### 6. Provision of clinical data standards and terminologies for health information in clinical service delivery

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	0 0%	0 0%	4 2%	7 4%	22 12%	69 38%	70 39%	9 5%
Performance	9 5%	16 9%	29 16%	42 23%	29 16%	15 8%	12 7%	29 16%

### 7. Provision of patient, provider and product/service standards and directories/indexes that provide unique identification.

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	0 0%	1 1%	0 0%	6 3%	27 15%	70 39%	69 38%	8 4%
Performance	29 16%	32 18%	32 18%	25 14%	15 8%	11 6%	6 3%	30 17%

### 8. Identification standards and data structure for the capture and storage of patient/provider, product and services information

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	1 1%	2 1%	4 2%	12 7%	35 20%	63 35%	51 28%	11 6%
Performance	23 13%	24 13%	28 16%	23 13%	20 11%	11 6%	7 4%	43 24%

### 9. Provision of a product and service directory

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	6 3%	8 4%	10 6%	26 14%	58 32%	35 19%	22 12%	15 8%
Performance	28 16%	26 14%	27 15%	18 10%	16 9%	8 4%	2 1%	55 31%

### 10. Provision of consent models governing the collection and handling of eHealth Information

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	1 1%	2 1%	2 1%	18 10%	35 20%	58 33%	53 30%	8 5%
Performance	27 15%	25 14%	28 16%	27 15%	12 7%	7 4%	3 2%	47 27%

### 11. Provision of Electronic Health Record Standards

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	1 1%	2 1%	3 2%	7 4%	22 12%	64 36%	71 40%	8 4%
Performance	32 18%	25 14%	25 14%	26 15%	18 10%	11 6%	10 6%	31 17%

### 12. Provision of technical integration (interoperability) standards

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	1 1%	2 1%	0 0%	7 4%	28 16%	72 40%	63 35%	7 4%
Performance	22 12%	24 13%	30 17%	32 18%	17 9%	14 8%	8 4%	32 18%

### 13. Provision of supply chain efficiencies (explore options such as common forms, of procurement, standard contracts and common purchasing processes)

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	4 2%	6 3%	17 9%	34 19%	43 24%	34 19%	13 7%	28 16%
Performance	19 11%	18 10%	30 17%	21 12%	10 6%	9 5%	3 2%	66 38%

### 14. Provision of user authentication and access control to ensure compliance with privacy laws and consent models

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	2 1%	0 0%	6 3%	18 10%	36 20%	53 30%	52 29%	10 6%
Performance	22 12%	28 16%	28 16%	25 14%	12 7%	7 4%	10 6%	47 26%

### 15. Provision of consent models governing the collection and handling of eHealth Information

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	1 1%	2 1%	4 2%	15 8%	39 22%	59 33%	49 27%	10 6%
Performance	26 15%	22 12%	31 17%	26 15%	13 7%	9 5%	6 3%	46 26%

### 16. Provision of EHR secure messaging and information transfer including a national security model for messaging and information transfer

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	1 1%	0 0%	3 2%	8 5%	24 14%	66 37%	67 38%	8 5%
Performance	27 15%	32 18%	25 14%	22 12%	15 8%	13 7%	8 4%	36 20%

### 17. Provision of a knowledge center providing knowledge sharing and expert advice

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	4 2%	3 2%	8 4%	31 17%	49 27%	45 25%	29 16%	10 6%
Performance	42 23%	24 13%	24 13%	25 14%	12 7%	9 5%	6 3%	37 21%

### 18. Encourage and facilitate the health information industry reform and technology reform to meet interoperability and implementation objectives.

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	1 1%	1 1%	0 0%	8 5%	34 19%	58 33%	68 39%	6 3%
Performance	42 23%	30 17%	26 14%	21 12%	13 7%	8 4%	12 7%	28 16%

## Performance to NeHTA's goals

NeHTA has widely publicised its goals which we have listed in the following 4 questions. We ask you to rate, on a 1 to 7 scale, NeHTA's performance against these goals, and also your opinion on the importance of these goals:

Highest number = highest importance/performance

### 19. Analyse the benefits of eHealth implementation in Australia

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	0 0%	5 3%	3 2%	9 6%	44 28%	49 31%	43 27%	4 3%

Performance	9	25	27	29	20	14	6	28
	6%	16%	17%	18%	13%	9%	4%	18%

20. Establish appropriate standards for eHealth implementation.								
Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	1	1	3	1	14	61	71	5
	1%	1%	2%	1%	9%	39%	45%	3%
Performance	16	36	23	20	20	17	2	25
	10%	23%	14%	13%	13%	11%	1%	16%

21. Create the appropriate supporting infrastructure for eHealth in Australia								
Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	5	4	7	7	21	53	55	7
	3%	3%	4%	4%	13%	33%	35%	4%
Performance	42	30	22	20	9	5	5	26
	26%	19%	14%	13%	6%	3%	3%	16%

22. Develop national eHealth policies								
Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	3	5	2	5	22	60	53	7
	2%	3%	1%	3%	14%	38%	34%	4%
Performance	28	30	22	20	13	8	7	28
	18%	19%	14%	13%	8%	5%	4%	18%

**Performance to NeHTA's work plan**

NeHTA has widely publicised its work plan. We have listed the major elements of this plan in the following 5 questions. We ask you to rate, on a 1 to 7 scale, NeHTA's performance against these work plan programs, and also your opinion on the importance of these programs:

Highest number = highest importance/performance

23. Enabling the unique identification of all individuals and healthcare providers across Australia								
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Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	0 0%	2 1%	1 1%	6 4%	20 13%	53 34%	71 45%	5 3%
Performance	27 17%	28 18%	23 15%	27 17%	16 10%	9 6%	4 3%	24 15%

**24. Exchanging clinical information electronically, using a common language with consistent terms, descriptions and formats.**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	1 1%	0 0%	2 1%	1 1%	14 9%	63 40%	71 45%	7 4%
Performance	16 10%	23 14%	30 19%	23 14%	20 13%	15 9%	8 5%	24 15%

**25. Identifying the greatest benefits for least cost, in the shortest time, with the least risk.**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	3 2%	6 4%	3 2%	17 11%	44 28%	45 28%	32 20%	8 5%
Performance	34 22%	27 17%	17 11%	24 15%	11 7%	5 3%	1 1%	39 25%

**26. Designing a national system of shared electronic health records for practitioners and consumers.**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	4 3%	5 3%	3 2%	10 6%	20 13%	54 34%	57 36%	5 3%
Performance	46 29%	26 16%	24 15%	17 11%	9 6%	7 4%	4 3%	26 16%

**27. Building a national product catalogue and e-procurement solution to drive efficiency across the public health sector supply chain.**

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	6 4%	7 4%	10 6%	25 16%	46 29%	32 20%	14 9%	17 11%
Performance	23 15%	22 14%	21 13%	25 16%	10 6%	11 7%	2 1%	43 27%

## NeHTA Consultation and Communication

One of the key capabilities for NeHTA to be effective is its consultation and communication skills. In the following 4 questions we are asking you to rate, on a 1 to 7 scale, NeHTA's performance on a particular aspect of communication and also your opinion of the importance of each of these aspects of communication:

Highest number = highest importance/performance

### 28. The breadth of the engagement process (number and variety of organisations engaged)

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	0 0%	1 1%	1 1%	12 8%	31 21%	42 28%	53 35%	11 7%
Performance	28 19%	27 18%	18 12%	23 15%	14 9%	10 7%	2 1%	29 19%

### 29. The quality of the material presented by NeHTA

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	0 0%	0 0%	0 0%	15 10%	42 28%	56 37%	27 18%	10 7%
Performance	17 11%	15 10%	19 13%	36 24%	23 15%	17 11%	4 3%	18 12%

### 30. The readiness of NeHTA to listen to and fairly evaluate feedback

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	0 0%	0 0%	2 1%	2 1%	24 16%	57 39%	53 36%	10 7%
Performance	39 26%	25 17%	12 8%	10 7%	13 9%	9 6%	5 3%	36 24%

### 31. The outcomes that have been achieved as a result of the consultation

Top number is the count of respondents selecting the option. Bottom % is percent of the total respondents selecting the option.	Lowest	2	3	4	5	6	Highest	Don't Know
Importance	0	0	1	5	25	58	31	28

importance	0%	0%	1%	3%	17%	39%	21%	19%
Performance	29	22	21	16	9	6	1	45
	19%	15%	14%	11%	6%	4%	1%	30%

## NeHTA Stucture and Governance

**32. Please provide any comments you have on the structure and governance of NeHTA. Issues you may want to think about here are**

The composition of the board, is there sufficient representation from, medical professionals or healthcare managers actively involved in the healthcare system, or technologist and systems vendors designing and deploying these systems.

Clearer definition of the role and relationship of AHIC  
 Clearer definition of the role and relationship of DoHA  
 Clearer definition of the role and relationship of AHMC

68 Responses

## The Final Questions

Below you will find three open-ended questions, that will allow you to provide us some general comments regarding NeHTA's overall performance:

**33. What has NeHTA been successful at doing**

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**34. What has NeHTA not been successful at doing**

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**35. Please let us know any other comments that you think are important in putting together our submission on NeHTA's performance**

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