Response to Request for Review

OF THE

Personally Controlled Electronic Health Record (PCEHR)

November 2013

HISA and HIMAA commend this submission to the PCEHR Review Panel, and wish it well in its deliberations. Our two organisations would welcome further involvement in the review process, either within the Panel's current terms of reference or beyond.

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Preface

Acknowledgements

HISA and HIMAA wish to extend our appreciation and acknowledgement to the 673 individuals who contributed to this survey. Thanks also to the 4 people who are primarily responsible for all this question writing and analysis work; you know who you are – you rock!

About HISA

With a 20+ year history, the Health Informatics Society of Australia Ltd (HISA) is **the peak body for health informatics & e-health in Australia**. We have a vested interest in growing workforce capacity and capability in heath IT and are passionate advocates for the e-health enabled transformation of healthcare.

HISA is a not-for-profit, member organisation with a broad and diverse stakeholder community with over 1000 active members and a database of over 13,000 committed participants in digital health, e-health and health informatics. We have access to the best minds in e-health nationally and globally including: IMIA (which links HISA to WHO & over 60 specialist health informatics organisations across the planet!), APAMI (Asia Pacific Association for Medical Informatics) and HINZ (Health Informatics New Zealand).

HISA membership is open to individuals and organisations. The majority of HISA members are senior players and leaders in their fields. Together, our membership represents thousands of years of combined experience in health and in health-IT.

About HIMAA

The Health Information Management Association of Australia Ltd (HIMAA) is **the peak professional body for health information management (HIM) professionals in Australia**. It has been serving the health information management profession since 1949.

Health information management professionals contribute to the health outcomes and delivery of the healthcare system through best practice health information management. Recognised occupations include health information managers (HIMs) and clinical coders (CCs). They hold the information systems key to the integration of patient records and funding flow in efficiency as well as effectiveness improvements to patient care.

HIMAA provides competency standards for the delivery of education and training across the learning life of the HIM practitioner, and strives to promote and support our members as the universally recognised specialists in information management at all levels of the healthcare system. A member of the national advocacy body for not-for-profit professional associations, Professions Australia, HIMAA is committed to improving the health of all Australians through professional information management.

Executive Summary

The Health Informatics Society of Australia (HISA) and Health Information Management Association of Australia (HIMAA) have united in response to an invitation to make a submission to the PCEHR Review due to:

- The commonality between their professional jurisdictions
- Their mutual support for the PCEHR and the role it can play in the general contribution of e-health to the national health reform agenda
- An agreed position on the importance to this reform program of the management of information and information flow through the judicious use of information technology cannot be underestimated
- A common understanding of the infancy of PCEHR implementation, and the need to provide a long-term change management perspective to PCEHR adoption

HIMAA and HISA elected to undertake a survey of their respective memberships in order to quantify the feedback to the Review Panel in this submission. Given the timeframe of the Review Panel's report program, and the choices the Panel has needed to make in terms of submission invitation, our two organisations also sought to broaden the survey catchment to enable input from those health and health management professionals involved with the PCEHR who may not appear in the 210 stakeholders engaged by NEHTA, which formed the basis of the Review Panel's submission invitation list.

The resulting survey is not presented as of statistical significance or research robustness. Given a response, however, of 673 online survey questionnaire completions in an extremely tight 3 day turnaround, combined with internal question validity indicated during analysis, we present results and analysis with the standing of a pilot study. HISA and HIMAA's confidence in the value of survey results is enough for us to structure this submission around those results, under the following headings based on the purposes of the PCEHR Review invitation:

- Involvement with PCEHR
- Expectations and Consultation
- Use (of PCEHR)
- Barriers to usage
- Usability
- Future work required
- Key drivers and incentives
- Private sector involvement
- Standards

Recommendations

HIMAA/HISA recommendations are made as these occur on the journey through this analysis. These are tabled as part of the submissions conclusion, and also listed here:

Involvement, Expectations, Consultation and Use

Recommendation 1: That the PCEHR Review recommends the immediate, comprehensive and extensive **integration of health information/informatics professionals** into current and future PCEHR and related infrastructure design, build and implementation and, importantly, health provider infrastructure's implementation of the PCEHR, and its linkage with other EMRs and fund management IT.

Barriers, Usability and Future Work Required

Recommendation 2: The PCEHR Review recommends the high and immediate prioritisation of the **engagement of health and health information professional associations and colleges in the change management process required** to ensure adoption of the PCEHR and enable its vital contribution to health reform success.

Key Drivers and Incentives

Recommendation 3: The PCEHR Review Panel consider **engaging HISA and HIMAA to undertake a comprehensive qualitative analysis of the 4590 individual free text responses contributed by the 673 respondents**. This analysis should be done over the course of the next 1-2 weeks to provide valuable data to inform the Panel's final report, or post-report to inform report implementation.

Strategies to Improve Adoption in Three Categories

Category One – Simplify Registration Processes & Improve Training & Support Approaches

Recommendation 4: The PCEHR Review recommends the convening and resourcing of a handpicked working group to **simplify all aspects of the PCEHR registration processes** for both providers and the public. This working group need to have regard for a balance between the need for controls and accountability, but also need to clearly recognise that the current processes are acting as severe impediments to the whole system and arrangements. This work needs to be completed by early February 2014.

Recommendation 5: The PCEHR Review recommends that, in parallel with recommendation 4, the **implementation of phase II of the recent workforce productivity, change and adoption work with AML Alliance on E-Health Support Officers' competencies and skills be progressed**. This work, which includes the proposed Competency Framework Toolbox, needs to be completed by late February 2014 so the E-Health Support Officers are better equipped to support primary care providers to embrace the PCEHR, particularly as more registrations are completed through the simplified registration processes.

Category Two – Medication Management through Engaging the Pharmacy Guild plus Radiology & Pathology

Recommendation 6: The PCEHR Review recommends the development of a strategy to achieve the holistic and seamless **sharing of pathology and radiology information in the PCEHR**. This strategy must be practically designed, with the support of the Pharmacy Guild and the respective pathology and radiology professional bodies, such that a richer functionality of the PCEHR can be more readily achieved.

Category Three – Proper Participation by Hospitals with Discharge Summaries Universally Implemented

Recommendation 7: The PCEHR Review recommends the consideration by COAG, through AHMAC of how to fast-track **universal hospital participation in the PCEHR**. The initial focus needs to be upon the implementation of universally available electronic discharge summaries in all jurisdictions by mid-2016. This particular functionality should provide a clear purpose and focus for the universal engagement of the hospital sector throughout Australia.

Recommendation 8: The PCEHR Review recommends harnessing the currently convened multi-jurisdictional CIO group as the vehicle for development of a practical and collaborative model for designing a national roll-out scheme for the PCEHR and associated infrastructure for enabling universal hospital participation.

Private Sector Involvement and Standards

Recommendation 9: The PCEHR Review recommends **vesting authority for the development and maintenance of technical and professional standards and associated engagement and change management strategies in the professional bodies concerned**, rather than in the private sector or in government bureaucracy. Government, however, should play a central role in auspicing, funding and supporting this authority and the infrastructure required for the PCEHR (terminology, identifiers, secure messaging).

Submission

HISA & HIMAA – Experts in e-health, health informatics and health information management

Our strategy – adopt a survey approach to enable the Review Panel to better place its considerations in the context of informed data

Online survey sent far and wide

Over 670 responses – testament to our reach, the quality of our approach and the motivation of our community to assist the Panel

Quantitative data analysed

9 recommendations

Additional opportunity – analysis & reporting on the 4560+ qualitative comments submitted

Providing data – not just opinion

Thanks for the opportunity

1.0 Introduction

The Health Informatics Society of Australia (HISA) and Health Information Management Association of Australia (HIMAA) thank the PCEHR Review Panel for the invitation to submit a response to the review of the Personally Controlled Electronic Health Record (PCEHR) commissioned by the Federal Minister for Health, the Hon Peter Dutton MP.

We understand that the key focus of the Panel is to report on the major reasons for a slow take up of the PCEHR platform and make recommendations on how to improve adoption and usage to help realise investment benefits of the e-health strategy.

HIMAA and HISA are mutually supportive of the PCEHR, and the role it can play in the general contribution of e-health to the national health reform agenda. The importance to this reform program to the management of information and information flow through the judicious use of information technology cannot be underestimated.

Quality health information from the patient encounter, of accuracy, integrity and consistency, is essential to the success of the continuity of care benefits that will yield the longer term improvements to national health outcomes at the same time as control healthcare spending that will see health funding go to quality point of care service delivery. **Astute and assiduous management of the relationship between information and data, and the optimisation of information technology to enable a systems-based approach to the translation of information between patient encounter and funding, will provide a key to health system reform success**.

1.1 Governing Principles behind this Submission

It is important to preface this submission with a few governing principles that have guided HISA and HIMAA's mutual interest in a joint response. The first and foremost of these is that **neither organisation is interested in supporting a Review that is aimed at a 'switch off' scenario for the PCEHR**. And we were both heartened to hear from the Review's Chair at our recent joint HITWA once day conference in Perth that this was not at all the intent of the Review.

The second principle is that **we find no value in a fault finding or blame-making process in relation of the history of PCEHR build and implementation, preferring instead the principle of quality improvement to address identifiable opportunities to accelerate the adoption of the PCEHR by its end users**. Again, we were reassured by Richard Royle's confirmation at HITWA 2013 in Perth that the federal government supported this principle also.

Both HIMAA and HISA are amongst the 210 stakeholders identified by the PCEHR Review, with which NEHTA has engaged during the development of the PCEHR. We both believe that the engagement attempt was well-meant, and conformed to a strategy that delivered engagement efficiency in terms of the use of taxpayer's funds. But from our perspective it was not as effective as it could have been, and did not allow sufficient exploration of the implications for the PCEHR of health information management and the engagement between health information and technology from a systems perspective.

Moreover NEHTA was not the sole authority involved in the PCEHR build. A private consortium led by Price Waterhouse Coopers, NCAP, was funded by government to engage in readiness research and with the consumer, and government itself played a strong performance management role in gatekeeping NEHTA's release of information on the PCEHR, as well as in its development.

Neither HISA nor HIMAA passes comment or makes judgement of the influence of government, the NCAP consortium, or NEHTA itself in the effectiveness of stakeholder engagement with the PCEHR. We simply observe that there were three key players involved, and **a consistent and coherent change management strategy or program in implementing the PCEHR has not been the result**.

2.0 Methodology of Approach

Our two organisations are amongst the 210 engaged by NEHTA in recent years to inform the development of the PCEHR, and whom the Review Panel has approached to invite submission. We have appreciated the opportunity to contribute extended by NEHTA, and have responded in the past to NEHTA stakeholder

engagement satisfaction surveys to assist NEHTA in improving their engagement strategy. In preparing this submission, HISA and HIMAA have chosen to design a survey based mostly on the foci for the review detailed in the letter of invitation from the Review Panel, but also in part on some of the questions we have answered in past NEHTA stakeholder engagement surveys, to enable the Review Panel to compare current state to an existing benchmark. **We trust this strategy will enable the Review Panel to better place its considerations in the context of informed data**.

Given the tight timeframe allocated to the Review Panel to make its report to the Minister, and therefore an equally tight timeframe for the preparation of submissions to the review by stakeholders, HIMAA and HISA have adopted a survey approach to data collection. The survey was designed in consultation with our organisations' governance leadership.

Our networks throughout health and e-health in Australia are vast and diverse. In order to capture the diversity of views and provide highly valuable, informed data to the Review Panel, we cast our net widely amongst relevant stakeholders, in order to capture individuals who may be using or in other relevant ways engaging with the PCEHR, but who may not have personally been involved in NEHTA's stakeholder engagement. In a three day turnaround, and given a general network appeal for on-distribution rather than a controlled sampling process, the results of this survey can only be considered in the nature of a pilot study. Nevertheless **the result, with over 670 responses, is substantial in the timeframe, and is testament to our reach, the quality of the survey and the motivation of our community to assist the Panel with their important work**.

We have used the analysis of the results of the survey as the backbone of the following submission, and make recommendations on behalf of our two organisations and their membership in the context of this analysis as it unfolds. **Key HISA/HIMAA commentary is bolded throughout**.

The full results of the survey, providing tabulated and graphical frequency, percentage and crosstabs are appended.

2.1 Scope

HIMAA and HISA confine the scope of their feedback to the Review Panel in this submission to their respective roles as peak bodies, standards-setters, arbiters of quality and education and training curriculum or competency authorities in their respective and overlapping professional fields.

The scope of the survey process used to gather data to inform the submission extends beyond the membership of HISA and HIMAA. The online survey was distributed widely beyond the associations' memberships to relevant stakeholders for on-distribution.

There was no control over distribution (except to the entire memberships of HIMAA and HISA). The rigor of formal-sampling, and the resulting robustness of formal research, is out of the scope of this submission. However, **the number of respondents and internal validity found within the survey based on the response, render the survey of sufficient significance as a pilot study to indicate immediate direction for the PCEHR Review Panel and directions for future work**.

The survey is thus presented as the foundation for this submission. HIMAA and HISA utilise the opportunity of reporting on survey results to make recommendations which pertain to the professional advocacy of their mutual governance interest.

2.2 Notes on the Analysis

It is worth noting that in designing and analysing the survey that informs this submission, we adopted the International Association for Public Participation's spectrum of community engagement levels because this is what is used by NEHTA in assessing the effectiveness of their stakeholder engagement. Its adoption therefore enables comparison of HISA/HIMAA data and existing benchmark data for the Review Panel.

We have also adopted Rogers' Diffusion of Innovation framework to analyse survey results because a. this framework is the evidence-based source of the terms of adoption so frequently used in relation to the PCEHR project (early adopters, early majority, late majority, late adopters), and b. because it is sociological in paradigm and thus more useful to a change management project than the product management and non-commercial marketing paradigms currently in play which, we believe, will have little impact on the adoption of the PCEHR.

3.0 Submission Structure

The survey was structured to provide data on respondent disposition to or experience of the purposes sought by the PCEHR Review:

- **Expectations** - The gaps between the expectations of users and what has been delivered
- **Consultation** - The level of consultation with key stakeholders during the development phase
- **Use** - The level of use of the PCEHR by healthcare professions in clinical settings
- **Barriers** - Barriers to increasing usage in clinical settings
- **Usability** - Key clinician and patient usability issues
- **Future Work** - Work that is still required including new functions that improve the value proposition for clinicians and patients
- **Drivers & Incentives** - Drivers and incentives to increase usage for both industry and health care professionals; Suggested improvements to accelerate adoption of the platform
- **Private Sector** - The applicability and potential integration of comparable private sector products; The future role of the private sector in providing solutions; The policy settings required to generate private sector solutions
- **Standards** - Comments on standards for Terminology, language and technology

The Submission takes each of these areas of focus in turn, reporting on what the survey reveals about responses to the issues as well as offering feedback on results implications for our respective professional constituencies. Recommendations are made as they arise from data analysis, with recommendations then listed in order as part of the conclusion, and in the Executive Summary.

Finally, the full survey results are appended.

HISA and HIMAA commend this submission to the PCEHR Review Panel, and wish it well in its deliberations. Our two organisations would welcome further involvement in the review process, either within the Panel's current terms of reference or beyond.

Survey Analysis & Recommendations

4.0 Respondents

673 individuals responded to the survey. Approximately half (43.3%) of 673 respondents were either Health IT, Health Information or Health Informatics professionals. The next largest groupings of respondents were management (14.4%) and clinicians (14.3%). There is also a 2.1% response rate from the CIO/CFM category in the survey, which would potentially bolster any of these three groupings. Consumers represented only 2.2% of respondents.

Interestingly, only a quarter (25.6%) of respondents to a HISA/HIMAA survey were from the hospital sector. And of these, even though private health services make up a third of the hospital sector, only 4.9% (19% of the sector) were private hospital. A further quarter (25.8%) of respondents were from the primary health care setting (14.3% Medicare Locals, 8.4% General Practice and 3.1% Primary/Community Care).

Another significant feature of respondent demographics was that **64.4% of respondents had over 11 years' experience in the health sector – so the survey is tapping into a seniority of professional**. This demographic, however, corresponds with much research demographic across the heath sector, including health information professionals, that the population is ageing faster than it is recruiting. A lower seniority in experience in Health IT or Informatics (48%) most probably reflects the relative youth of the professional field itself.

5.0 Involvement with PCEHR

It is also significant that **48% of respondents register some form of professional engagement with the PCEHR**. Of these, two thirds (66.6%) were involved in the build or implementation of the health record, while a further 22% are involved with systems development or integration relating to PCEHR. Almost half (49.4%) of this demographic were also actively involved in using the PCEHR now. Moreover, of all respondents, a majority (52.9%) believe they are informed well enough about PCEHR to know what they feel they need to, while 32.5% know the basics.

As an aside, given this level of familiarity with the PCEHR, it is interesting that less than a half of respondents (48.7%) have registered for their own PCEHR. Of the 51.3% who remain unregistered, 79% are yet to attempt to register (R=40.5%) while 21% (R=10.8%) have attempted registration but encountered difficulties. An 18% difficulty rating for registration, however, is a cause for concern for PCEHR adoption if the figure were generalisable. If anything, given that respondents are clearly well in the early adopter camp, the registration difficulty factor would increase for the rest of the early adopter population (16% of the general population) and amplify through the early majority (34%) and late majority (34%) of adopters if not addressed.

6.0 Expectations and Consultation

More respondents (44%) disagree that the PCEHR system has met their expectations that agree (18%). Over a quarter (28%) of respondents neither agree nor disagree, while 10% have no expectations. Of these respondents, interestingly health information (HI) professionals strongly disagree less than others (11.5% vs 18.0%), disagree more (32.7% vs 25.5%) and are also more inclined to ambivalence on agreement (31.5% vs 27.0%). They certainly agree less (14.5% vs 19.7%). Without further research we are unable to explain this

variation, but a qualitative analysis of the 312 free comments in response to this question may yield some indicators. The greater ambivalence and lesser tendency towards extreme disagreement would seem to indicate, however, a lower engagement with the PCEHR. If this is the case, then it is of concern to HIMAA and HISA.

It would be important for the Review Panel to establish what respondent expectations were, particularly for HI professionals. This query was beyond the scope of the HISA/HIMAA snap survey.

It would also be useful for the Review to explore the link between respondent expectations of the PCEHR and their engagement by those designing and building the PCEHR, because a strong majority (63.5%) felt that they were not engaged at all.

Of those who were engaged (221, 36.5%), potentially only 6% felt the engagement met their needs completely. Some 21% felt the consultation substantially met their needs, while 65% felt their consultation needs were only partially met. This leaves 8% of those consulted who felt the consultation did not meet their needs at all.

Of this 36.5% who experienced engagement, cited their experience of engagement at the following levels in the International Public Participation (IAP2) spectrum of community engagement:

IAP2 Level	Survey	Benchmark	Survey - HI Professionals
L1 **Information** – I was kept informed	48.5%	73.2%	45.3%
L2 **Consultation** – my feedback was sought	30.4%	52.4%	30.1%
L3 **Involvement** – my concerns and aspirations were consistently understood and considered	5%	23.4%	4%
L4 **Collaboration** – my advice was sought and my recommendations were incorporated into decisions made	14%	12.4%	20%
L5 **Empowerment** – my decisions were implemented	2%	4.8%	2%

The Benchmark is drawn from Australian and New Zealand International Association of Public Participation (IAP2) partners benchmarking with community engagement experiences in 2009 and 2010. It should be remembered that respondents to this survey were drawn from beyond the individuals directly engaged by NEHTA in the 210 stakeholder from whom the PCEHR Review Panel has invited submission. There would be a difference in results if this HISA/HIMAA survey had run the same measurement with the NEHTA 210. This would produce a direct comparator of current perceptions of engagement.

It should also be noted that the HIMAA/HISA survey results are a column sum to 100%, whereas the benchmark A/NZ IAP2 data allows for multiple responses.

Nevertheless, it is of concern to HIMAA and HISA that HI professionals responding to our snap survey are generally less informed, consulted and involved in the PCEHR engagement strategy than other respondents. We believe the greater propensity towards collaboration reflects a finding of a recent HIMAA research program with its membership: that when professionals in health infrastructure engage with health

information professionals at the management level, they begin to understand the full extent of the system-wide contribution such professionals can make and engage with them more.

7.0 Use

Just under half (42.2%) of healthcare professionals and clinicians responding to this question are using the PCEHR compared to the 49.4% of current PCEHR users from the same professional groupings who registered current PCEHR use in section 2 above. This minor (R=±2%) variation in correlation between the two questions indicates the rigor of the survey design in implementation.

The disappointing feature of this result for advocates of the PCEHR is the proportion of users integrating the health record into their daily practice (6%). The vast majority (76%) are still very early in the adoption of the health record system, accessing it once a month, mostly to access information, uploading a little and assisting patients to access the system. It is interesting that clinician usage itself does not vary significantly from other health professionals responding to this section.

From HIMAA and HISA's perspective, the prevalence of health information (HI) support (just 21 of 673 respondents) is of grave concern, particularly given the deficit perception of stakeholder engagement experienced by health information/informatics professionals in section 3 above. If this is an indication of the engagement by health provider infrastructure with health information & informatics specialists, the future of the contribution e-health and the PCEHR can make to the current health reform agenda is under threat.

The current dependence of the PCEHR's change and adoption strategy, and e-health in general, on clinician adoption – but without a clear and funded approach to supporting the health information/informatics workforce to support change and adoption by the clinical community is misplaced. Compare, for instance, the proportion of clinicians responding to the HISA/HIMAA survey (36%) who disagree with the value of the PCEHR as a tool in assisting in patient care compared to non-clinician respondents (19.3%). Compare this again to the proportion of clinicians agreeing with the PCEHR's value (36%) compared to non-clinicians (64%). Clinicians are by no means the PCEHR's strongest exponents.

Given the central role of health information in the integration of patient records and funding flow in efficiency as well as effectiveness improvements to patient care, health outcome gains that will result from e-health's contribution to the reform project, and the flow-on in health funding savings, will be lost without concerted engagement with the HI professions.

HISA and HIMAA strongly recommend that a high priority to emerge from the PCEHR Review is the immediate, comprehensive and extensive integration of health information/informatics professionals into health provider infrastructure's implementation of the PCEHR, and its linkage with other EMRs and fund management IT.

Recommendation 1: That the PCEHR Review recommends the immediate, comprehensive and extensive **integration of health information/informatics professionals** into current and future PCEHR and related infrastructure design, build and implementation and, importantly, health provider infrastructure's implementation of the PCEHR, and its linkage with other EMRs and fund management IT.

8.0 Barriers to Usage

An overwhelming majority (80%) of respondents to this issue in the HISA/HIMAA survey agreed that barriers exist. There are however **1600 volunteered examples of such barriers volunteered by 70% of the total respondents to the survey which require thorough qualitative analysis to yield useful information for the PCEHR Review Panel**.

9.0 Usability

There was less concern amongst HIMAA/HISA survey respondents about the usability of the PCEHR portal than about its clinical desktop software interface.

A large number of respondents (39%) had no issue with the portal because they do not access it. Of those that do, 49% neither agreed nor disagreed with the proposition that there were portal issues, while 47% agreed (R=28%). By contrast, 22% of respondents had placed a 'don't know' response on the clinical desktop software usability issue. While 25% of respondents neither agreed not disagreed, 48.5% agreed that there were usability problems with the software.

There are, however, 720 volunteered examples of usability issues with the PCEHR clinical desktop software and portal that required qualitative analysis to provide further useful information to the Review Panel.

10.0 Future Work Required

Only 39 respondents (7.2%) disagreed with the premise that future work on the PCEHR will see it realise its value to the healthcare delivery environment. The strength of opinion on work required by 339 respondents was clear and ranked:

Improving the ease of use of the system	79.5%
Accelerating introduction of planned features eg pathology, radiology etc	76.4%
Improving ease of registration for healthcare service providers	74,0%
Making it easier to contribute information to the system	73.7%
Increasing the range of information available in the system	73.7%
Better training of users	64.0%

Variation in ranking between the top 5 items was not as significant as between them and 'better training of users'. There were 22% of respondents indicating other work items, and **75 volunteered comments requiring further qualitative analysis**.

One future work priority on which there was no doubt amongst respondents to the HISA/HIMAA survey was **the importance of the role of professional associations in the clinical and e-health sector in providing education, training for and engagement with the PCEHR's critical stakeholders**. Over 80% of respondents to this question (R=66%) agreed or strongly agreed.

A similar number (R=62%) agreed that **change management engagement between Australia's skilled health informatics/information management workforce and clinical informaticians will add essential value to future work**.

HIMAA and HISA strongly recommend to the PCEHR Review Panel that high and immediate priority be placed on the engagement of professional associations and colleges in general and health information professionals in particular in the change management process required to ensure adoption of the PCEHR and enable its vital contribution to health reform success.

Recommendation 2: The PCEHR Review recommends the high and immediate prioritisation of the **engagement of health and health information professional associations and colleges in the change management process required** to ensure adoption of the PCEHR and enable its vital contribution to health reform success.

11.0 Key Drivers and Incentives

Around two thirds of the HISA/HIMAA survey respondents provided their views on a range of key drivers and incentives proposed.

There was division on the extent to which current drivers and incentives will see the PCEHR roll out results in successful system implementation and the delivery of better healthcare to Australians, with 33% of respondents agreeing with the proposition and 41.1% disagreeing, with 18.4% straddling the fence. Given this ambivalence, the Review Panel appears well advised to consider respondent ranking of the options presented by HIMAA and HISA in the survey questionnaire. The rankings for both categories provide clear direction.

Key Drivers	Response
Continuity of patient care	82.4%
Quality and safety gains in patient care	71.4%
Patient demand for health service registration	44.5%
ePIP Practice Incentive Program	41.0%
Organisational capacity pressures	24.8%
Business growth opportunities	16.8%
ABF/casemix	11.3%

While only 13.9% of respondents recommended other options, none of which will achieve the same ranking as the 6 suggested by the two professional associations, these yield **66 individual responses which would benefit the Review Panel with qualitative analysis**.

Incentives to increase usage of the PCEHR	Response
Funding for clinicians to upload health summaries and actually use the PCEHR	78.3%
Funding to link own service EMR with PCEHR	61.2%
Funding to enrol patients in PCEHR	50.2%
Funded consultancy to assist linkage	37.2%
Visibility of patient registration rate	37.0%

A significant number of respondents (27%) offered other incentives. While no single one of these will achieve the ranking of the 5 options suggested by HISA and HIMAA, there are nevertheless **120 responses that would yield valuable intelligence for the PCEHR Review Panel with proper qualitative analysis**.

The same is true of improvements which accelerate the adoption of PCEHR, which are ranked below. Since variations between rankings in this more extensive list of options suggested by the professional associations is less definitive, there are **75 additional options which the Panel would do well consider including in their considerations based on further qualitative analysis**.

Suggested Improvements to Accelerate PCEHR Adoption	Response
Disease management	64.1%
Medication management	61.6%
Pathology	60.7%
Improve usability	60.5%
Improve accessibility - ability to input into the PCEHR is currently restricted to health professionals with compliant practice software	58.4%
Diagnostic imaging	56.3%
Increase engagement and education of benefits	56.3%
Opt-out for consumers/patients	47.1%
PCEHR Portal to have a 'write' function (currently the portal is read-only for clinicians)	47.1%
Complete roll out of current program	34.6%
Opt-out for healthcare professionals/clinicians	33.8%
Australian Medicines Terminology	26.3%

There are also **1,122 contributions in response to a call for six key practical foci for work which, if completed by mid-2016, would significantly improve the value proposition and usability of the PCEHR for clinicians and patients, leading to increased adoption rates.** Analysis of this data may provide strong scenario modelling for the Review Panel to assist in prioritising PCEHR implementation planning.

Indeed, there are a total of 4590 qualitative responses in the survey results as a whole. The Review Panel may be well advised to consider engaging HISA and HIMAA to undertake a comprehensive qualitative analysis of survey results to better inform their final report. This analysis could be undertaken in a timely manner given sufficient resourcing.

Recommendation 3: The PCEHR Review Panel consider **engaging HISA and HIMAA to undertake a comprehensive qualitative analysis of the 4590 individual free text responses contributed by the 673 respondents**. This analysis should be done over the course of the next 1-2 weeks to provide valuable data to inform the Panel's final report, or post-report to inform report implementation.

An initial review of the six key practical items of work that would increase PCEHR adoption, however, does indicate six recommendations logically grouped into three categories as follows:

Category One – Simplify Registration Processes & Improve Training & Support Approaches:

Recommendation 4: The PCEHR Review recommends the convening and resourcing of a handpicked working group to **simplify all aspects of the PCEHR registration processes** for both providers and the public. This working group need to have regard for a balance between the need for controls and accountability, but also need to clearly recognise that the current processes are acting as severe impediments to the whole system and arrangements. This work needs to be completed by early February 2014.

Recommendation 5: The PCEHR Review recommends that, in parallel with recommendation 4, the **implementation of phase II of the recent workforce productivity, change and adoption work with AML Alliance on E-Health Support Officers' competencies and skills be progressed**. This work, which includes the proposed Competency Framework Toolbox, needs to be completed by late February 2014 so the E-Health Support Officers are better equipped to support primary care providers to embrace the PCEHR, particularly as more registrations are completed through the simplified registration processes.

Category Two – Medication Management through Engaging the Pharmacy Guild plus Radiology & Pathology

There are two parallel streams here aimed primarily at securing support of the Pharmacy Guild in conjunction with the Pathology and Radiology professions.

Essentially many are saying the medication management and the holistic and seamless sharing of pathology and radiology results needs to be properly addressed so that a much richer functionality and usefulness of the PCEHR can be effectively introduced in an overall widespread strategy within 2-3 years.

Recommendation 6: The PCEHR Review recommends the development of a strategy to achieve the holistic and seamless **sharing of pathology and radiology information in the PCEHR**. This strategy must be practically designed, with the support of the Pharmacy Guild and the respective pathology and radiology professional bodies, such that a richer functionality of the PCEHR can be more readily achieved.

Again specific and achievable timelines need to be set for this so that clear results are apparent before mid-2016. The actions from Category One will clearly assist in taking the two Category Two streams forward effectively.

Category Three – Proper Participation By Hospitals with Discharge Summaries Universally Implemented

Recommendation 7: The PCEHR Review recommends the consideration by COAG, through AHMAC of how to fast-track **universal hospital participation in the PCEHR**. The initial focus needs to be upon the implementation of universally available electronic discharge summaries in all jurisdictions by mid-2016. This particular functionality should provide a clear purpose and focus for the universal engagement of the hospital sector throughout Australia.

Recommendation 8: The PCEHR Review recommends **harnessing the currently convened multi-jurisdictional CIO group** as the vehicle for development of a practical and collaborative model for designing a national roll-out scheme for the PCEHR and associated infrastructure for enabling universal hospital participation.

In doing this the CIO group should do an immediate stock take of what is currently working and/or what arrangements are most advanced and seek pragmatic ways of nationally sharing what exists and building a co-operative approach and framework for taking this forward so the arrangements can be effectively implemented an all jurisdictions, by the overall deadline.

12.0 Private Sector

Only 15.7% of a total of 484 respondents consider that existing software could fulfil the role of the PCEHR, whilst a total of 25.2% disagree that there is existing software that could fulfil the role, with 37.4% saying that they don't know.

There were 53 individual responses to the question asking about the name of existing software products where respondents believe these products can fulfil the PCEHR role.

Overall these responses, about current potentially substitute products, do not provide any clear case for even considering replacing the PCEHR with an existing alternative software product.

Regarding the potential role of the private sector - only an overall total of 12.9% out of a total of 472 respondents agreed that the private sector could play a viable role in hosting the system and managing the data it holds, with an overall 49.4% disagreeing with this option. Similarly a total of 40.5%, out of a total of

474 respondents, either strongly disagree, or, disagree with the private sector management of the PCEHR, with a total of 27.2% either agreeing or strongly agreeing with this option.

Based on these results, there is a strong indication that **the current prevailing view does not support any significant direction for moving towards a private sector model for managing and hosting the PCEHR arrangements including the data it holds.**

A total of 470 people responded to the question about PCEHR interoperability specifications not allowing private sector software providers to interact adequately with it. A total of 47% either don't know, or neither agree, or, disagree, whereas an overall total of 28.1% either agree, or, strongly agree, against a total of 14.9% who either strongly disagree, or, disagree. The overall response to this question indicates that this issue needs to be seriously examined, especially in the context of potential technical connectivity barriers in implementing the overall PCEHR arrangements.

40% of 470 respondents strongly agree and 29.6% also agree that elements of the PCEHR, such as standards, medical terminology, clinical classifications and ownership of the record, should never be proprietary of the private sector. Only an overall total of 8.7% either strongly disagree, or, disagree with this. This then supports the case for these areas of responsibility remaining with the appropriate authorities. **HIMAA and HISA would suggest the relevant professional groups are the more appropriate authority for the development and maintenance of standards and knowledge relating to professional practice**.

13.0 Standards

A total of 81.9% out of 484 respondents either strongly agree, or, agree that the role of standards for terminology and language is paramount to the success of the PCEHR, with a significantly lower overall 5.7% either strongly disagreeing, or, disagreeing with this. This then provides **a clear demonstration of the need for ongoing recognition of and adherence to best practice standards in all aspects of continuing to implement the overall PCEHR arrangements**.

Similarly an overall 85.8% of 483 respondents either strongly agree, or, agree that the government should be involved in and support standard setting and development, with a significantly lower overall 3.5% either strongly disagreeing, or, disagreeing with this.

An overall total of 92.4% out of 482 respondents either strongly agree, or, agree about the critical role for professional standards in maintaining effective records, whereas only 1.6% either strongly disagree, or, disagree with this.

Recommendation 9: The PCEHR Review recommends **vesting authority for the development and maintenance of technical and professional standards and associated engagement and change management strategies in the professional bodies concerned**, rather than in the private sector or in government bureaucracy. Government, however, should play a central role in auspicing, funding and supporting this authority and the infrastructure required for the PCEHR (terminology, identifiers, secure messaging).

Conclusion

The PCEHR is still very early on in its adoption program. Taking NEHTA's most recent estimate, for instance, that 53% of general practices are registered as health providers with the system, GPs are still only half way through the initial adoption process, straddling the early majority of adopters and later majority of adopters. They are over the half-way mark, even though the HIMAA/HISA pilot study detailed in this submission indicates that their usage will still be in its infancy with the majority.

The 800,000 estimate of patient registrations with the PCEHR most recently announced by NEHTA (September) is only 3-4% of the population – essentially, just on the front door step of early adopters.

It is far too early to judge the success of the program, or forecast its fate or fortune. Adoption of an innovation such as this is a long term change management project of a much longer duration than the 16 months since the PCEHR's official go-live on 1 July last year. However, the snap survey conducted by our two organisations to research the content of this submission has revealed practical recommendations the PCEHR Review Panel is encouraged to consider:

14.0 Recommendations

Involvement, Expectations, Consultation and Use

Recommendation 1: That the PCEHR Review recommends the immediate, comprehensive and extensive **integration of health information/informatics professionals** into current and future PCEHR and related infrastructure design, build and implementation and, importantly, health provider infrastructure's implementation of the PCEHR, and its linkage with other EMRs and fund management IT.

Barriers, Usability and Future Work Required

Recommendation 2: The PCEHR Review recommends the high and immediate prioritisation of the **engagement of health and health information professional associations and colleges in the change management process required** to ensure adoption of the PCEHR and enable its vital contribution to health reform success.

Key Drivers and Incentives

Recommendation 3: The PCEHR Review Panel consider **engaging HISA and HIMAA to undertake a comprehensive qualitative analysis of the 4590 individual free text responses contributed by the 673 respondents**. This analysis should be done over the course of the next 1-2 weeks to provide valuable data to inform the Panel's final report, or post-report to inform report implementation.

Strategies to Improve Adoption in Three Categories

Category One – Simplify Registration Processes & Improve Training & Support Approaches

Recommendation 4: The PCEHR Review recommends the convening and resourcing of a handpicked working group to **simplify all aspects of the PCEHR registration processes** for both

providers and the public. This working group need to have regard for a balance between the need for controls and accountability, but also need to clearly recognise that the current processes are acting as severe impediments to the whole system and arrangements. This work needs to be completed by early February 2014.

Recommendation 5: The PCEHR Review recommends that, in parallel with recommendation 4, the **implementation of phase II of the recent workforce productivity, change and adoption work with AML Alliance on E-Health Support Officers' competencies and skills be progressed**. This work, which includes the proposed Competency Framework Toolbox, needs to be completed by late February 2014 so the E-Health Support Officers are better equipped to support primary care providers to embrace the PCEHR, particularly as more registrations are completed through the simplified registration processes.

Category Two – Medication Management through Engaging the Pharmacy Guild plus Radiology & Pathology

Recommendation 6: The PCEHR Review recommends the development of a strategy to achieve the holistic and seamless **sharing of pathology and radiology information in the PCEHR**. This strategy must be practically designed, with the support of the Pharmacy Guild and the respective pathology and radiology professional bodies, such that a richer functionality of the PCEHR can be more readily achieved.

Category Three – Proper Participation by Hospitals with Discharge Summaries Universally Implemented

Recommendation 7: The PCEHR Review recommends the consideration by COAG, through AHMAC of how to fast-track **universal hospital participation in the PCEHR**. The initial focus needs to be upon the implementation of universally available electronic discharge summaries in all jurisdictions by mid-2016. This particular functionality should provide a clear purpose and focus for the universal engagement of the hospital sector throughout Australia.

Recommendation 8: The PCEHR Review recommends **harnessing the currently convened multi-jurisdictional CIO group** as the vehicle for development of a practical and collaborative model for designing a national roll-out scheme for the PCEHR and associated infrastructure for enabling universal hospital participation.

Private Sector Involvement and Standards

Recommendation 9: The PCEHR Review recommends **vesting authority for the development and maintenance of technical and professional standards and associated engagement and change management strategies in the professional bodies concerned**, rather than in the private sector or in government bureaucracy. Government, however, should play a central role in auspicing, funding and supporting this authority and the infrastructure required for the PCEHR (terminology, identifiers, secure messaging).

HISA and HIMAA commend this submission to the PCEHR Review Panel, and wish it well in its deliberations. Our two organisations would welcome further involvement in the review process, either within the Panel's current terms of reference or beyond.

Survey Results

15.0 Survey Respondents

Total number of respondents = 673

15.1 Job Role

Job Role Please indicate which of the below most accurately describes your regular job role		
	Response Percent	**Response Count**
Health Information Manager/Professional	18.0%	121
Health IT Professional	18.0%	121
Other, please specify	10.8%	73
Health Informatician	7.3%	49
Clinician – physician / doctor	7.1%	48
Manager / Head of Department	6.8%	46
Academic / Researcher / Educator	5.3%	36
Government employee / public servant	5.1%	34
CEO / GM	4.2%	28
Clinician – allied health / dental / optometry	3.4%	23
Practice manager	3.4%	23
Consultant	2.7%	18
Consumer / patient	2.2%	15
CIO / CFM	2.1%	14
Clinician – nurse	2.1%	14
Clinician - other	0.7%	5
Student	0.7%	5
	Total Responses	**673**

15.2 Organisation Setting

Organisation Setting Please indicate which of the below best describes the type of organisation you work for		
	Response Percent	**Response Count**
Hospital – Public	20.7%	139
Medicare Local	14.3%	96
Technology	9.6%	64
General Practice - accredited	8.4%	56
Other, please specify	7.6%	51
Government – State	6.6%	44
Hospital – Private	4.9%	33
Consulting	3.9%	26
Education	3.4%	23
Government – Federal	3.4%	23
Primary / Community Care	3.1%	21

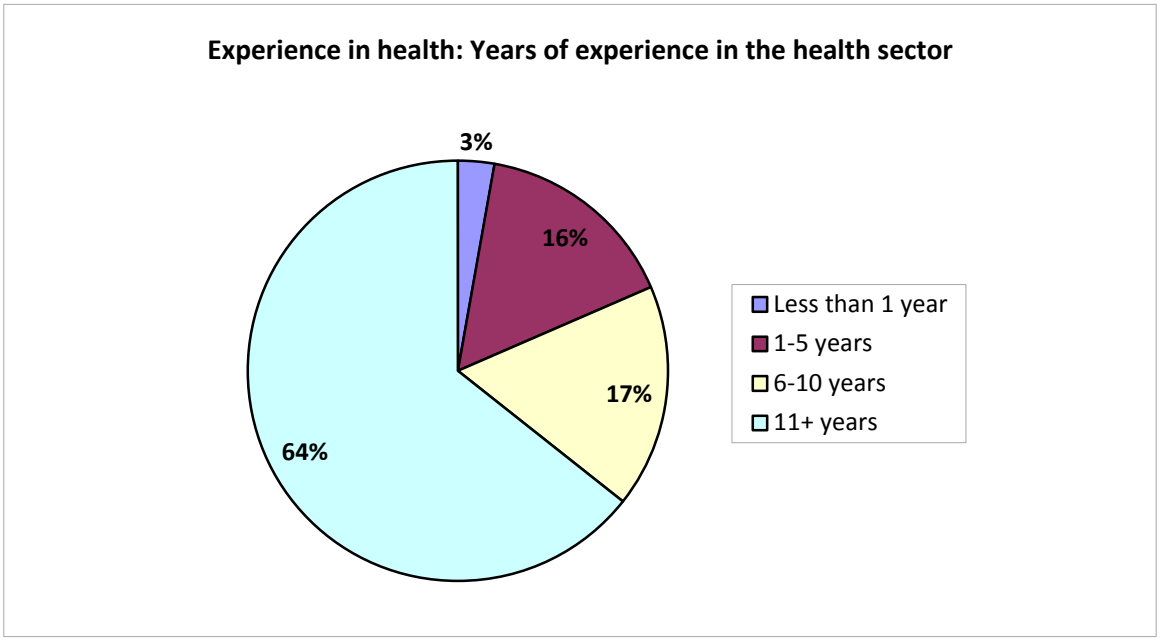
Public /Population Health	2.2%	15
Aged Care	2.1%	14
Association / Industry Body	1.9%	13
Allied Health	1.5%	10
Consumer	1.2%	8
Pathology	1.2%	8
Pharmacy	1.0%	7
Imaging	0.9%	6
Medical and/or Professional College	0.7%	5
Specialist	0.6%	4
Insurance	0.3%	2
Financial / Investment / Legal	0.1%	1
Media	0.1%	1
General Practice - non-accredited	0.0%	0
	Total responses	**670**

15.3 Organisation Size

Organisation Size **Number of staff in your organisation**		
	Response Percent	**Response Count**
Greater than 1000	34.1%	224
50 to 199	22.4%	147
11 to 49	20.1%	132
200 to 999	12.3%	81
Less than 10	11.0%	72
	Total responses	**656**

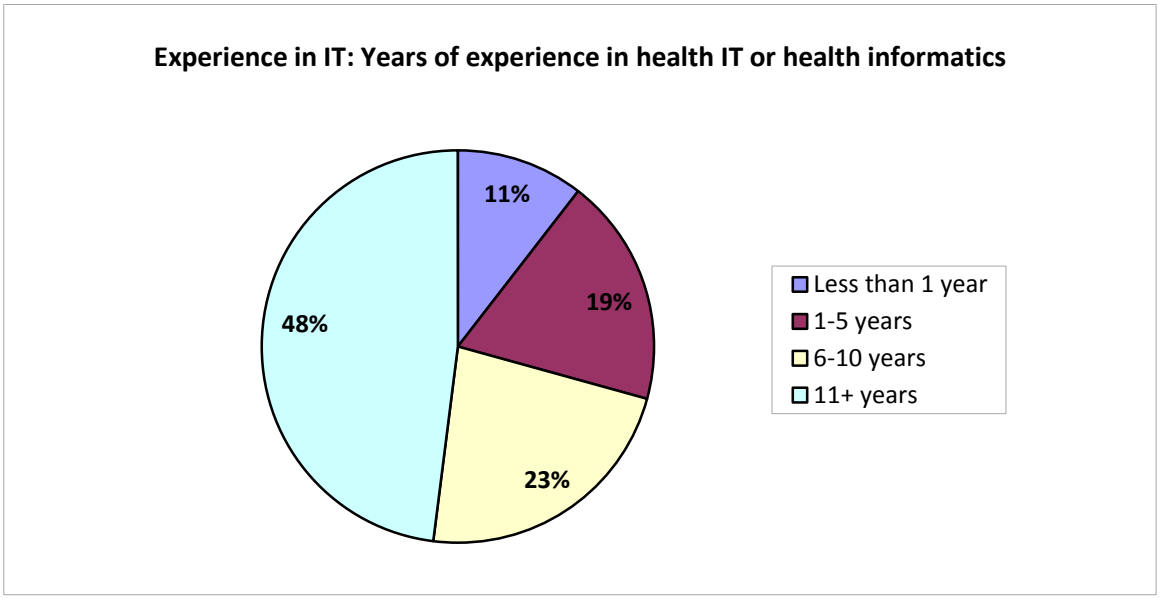
15.4 Experience in Health

Experience in health **Years of experience in the health sector**		
	Response Percent	**Response Count**
11+ years	64.4%	419
6-10 years	17.2%	112
1-5 years	15.7%	102
Less than 1 year	2.8%	18
	Total responses	**651**



15.5 Experience in IT

Experience in IT Years of experience in health IT or health informatics		
	Response Percent	**Response Count**
11+ years	48.0%	317
6-10 years	22.7%	150
1-5 years	18.8%	124
Less than 1 year	10.5%	69
	Total responses	**660**



15.6 Professional/Industry Organisation Membership

Professional/Industry Organisation Membership		
	Response Percent	**Response Count**
HIMAA	15.5%	102
HISA	26.5%	174
Other	61.7%	405
	Total responses	**656**

15.7 PCEHR – Professional Involvement

PCEHR – professional involvement Respondent's professional involvement in the PCEHR		
	Response Percent	**Response Count**
PCEHR project implementation role (eg - BA or PM)	44.4%	144
Designer/ Builder / Advisor / Consultant during the 'build/development' of the PCEHR	22.2%	72
System developer or integrator	21.6%	70
User - Clinician reading content	19.8%	64
User - Healthcare contributor submitting data to PCEHR	17.9%	58
User - Clinician uploading content	11.7%	38
Other		92
	Total responses	**324**

15.8 PCEHR – Understanding

PCEHR - understanding Respondents' self-assessed level of knowledge/understanding about the PCEHR		
	Response Percent	**Response Count**
Expert	10.9%	73
Well informed - I know most things I need to	42.0%	282
I know the basics	32.5%	218
I don't know much	10.4%	70
I have no knowledge/understanding of the PCEHR	4.2%	28
	Total responses	**671**

15.9 PCEHR Personal

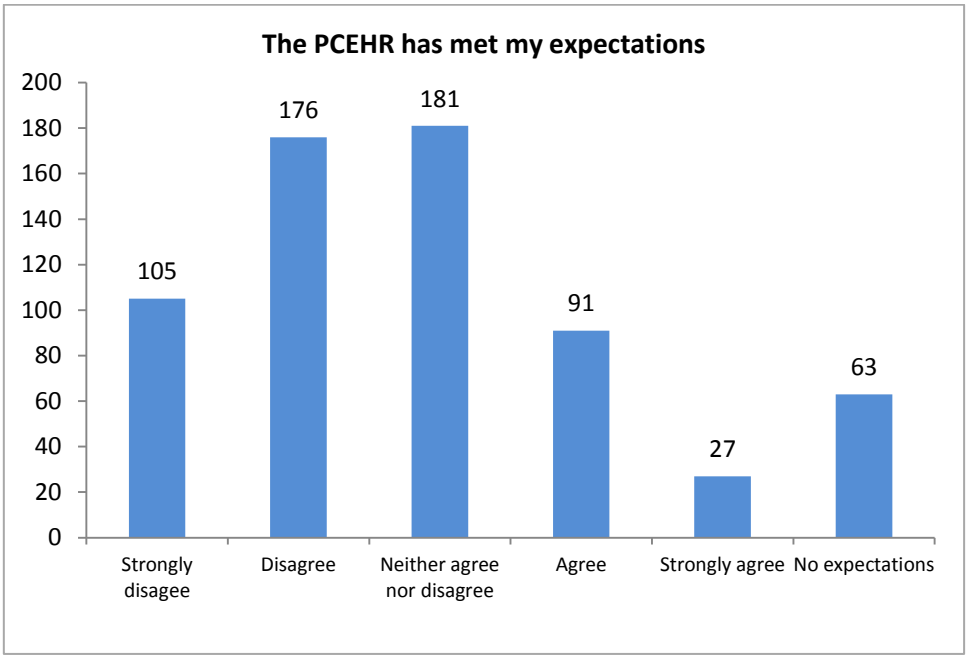
PCEHR - personal Respondents' registration for their own personal PCEHR		
	Response Percent	**Response Count**
Yes	48.7%	325
No - never tried to register	40.5%	270
No - have tried to register but experienced issues	10.8%	72
	Total responses	**667**

16.0 Expectations

Terms of Reference	The gaps between the expectations of users and what has been delivered

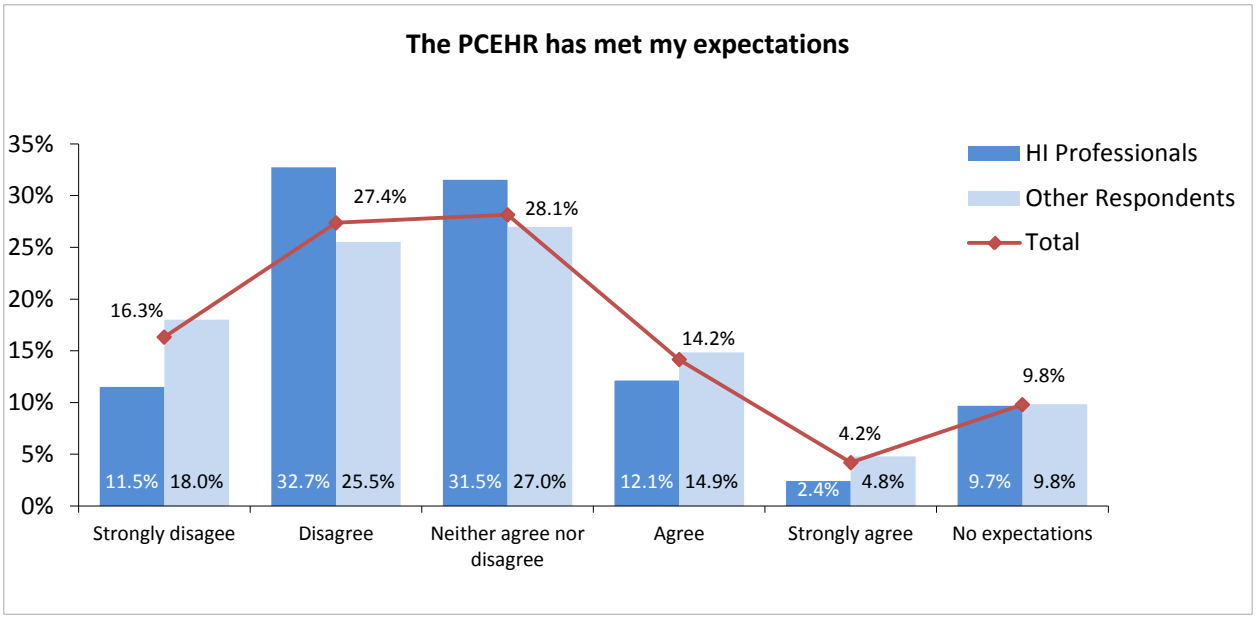
16.1 Expectations – All Respondents

The PCEHR system to date has met my expectations		
	Response Percent	**Response Count**
Strongly disagree	16.3%	105
Disagree	**27.4%**	**176**
Neither agree nor disagree	**28.1%**	**181**
Agree	14.2%	91
Strongly agree	4.2%	27
Don't know	9.8%	63
Total responses		**643**



16.2 Expectations – HI Professionals

The PCEHR system to date has met my expectations						
	HI Professionals		Other Respondents		Total	
	Response Percent	Response Count	Response Percent	Response Count	Response Percent	Response Count
Strongly disagree	11.5%	19	18.0%	86	16.3%	105
Disagree	**32.7%**	**54**	25.5%	122	27.4%	176
Neither agree nor disagree	31.5%	52	**27.0%**	**129**	**28.1%**	**181**
Agree	12.1%	20	14.9%	71	14.2%	91
Strongly agree	2.4%	4	4.8%	23	4.2%	27
No expectations	9.7%	16	9.8%	47	9.8%	63
Total responses		**165**		**478**		**643**



16.3 Comments - Expectations

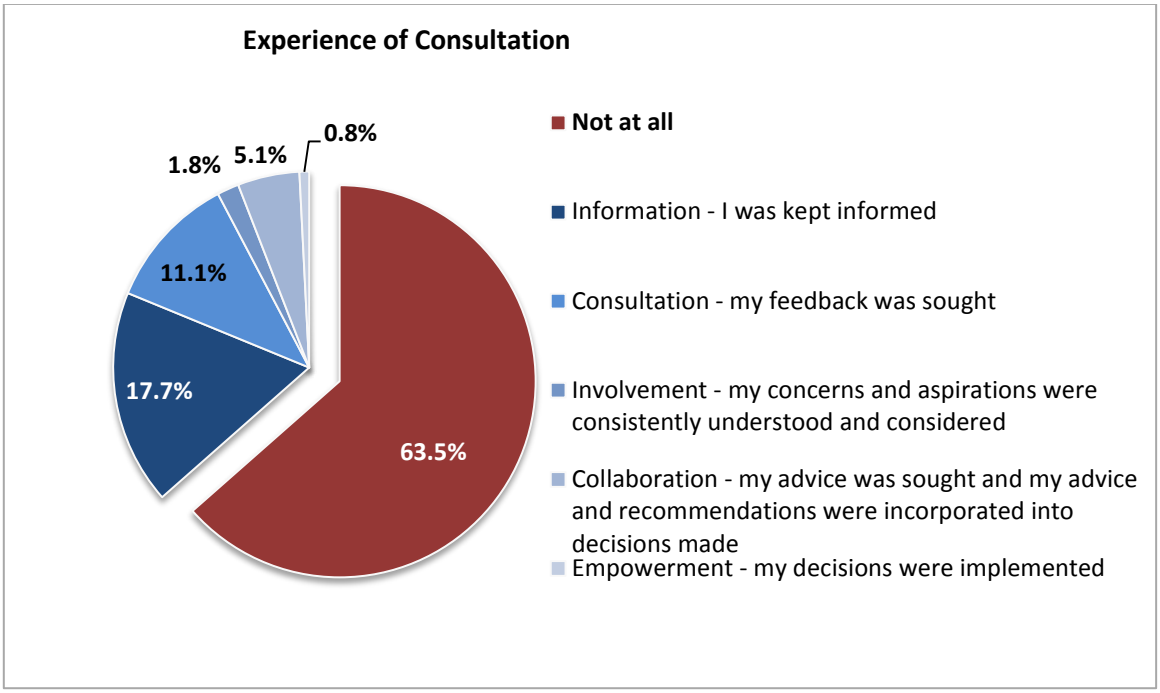
312 individual responses are available for further analysis.

17.0 Consultation

Terms of Reference	The level of consultation with key stakeholders during the development phase

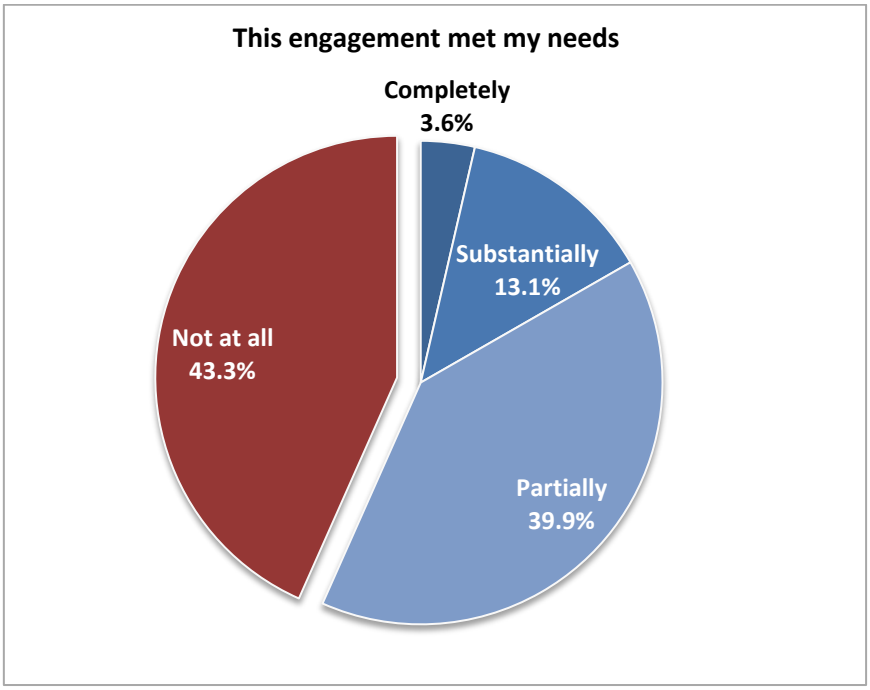
17.1 Experience of Consultation

I was directly engaged by the government, NEHTA, contractors or representative bodies (eg - the AMA) to comment on or participate in the PCEHR program of work at the following levels	Response Percent	Response Count
Not at all	63.5%	384
Information - I was kept informed	17.7%	107
Consultation - my feedback was sought	11.1%	67
Involvement - my concerns and aspirations were consistently understood and considered	1.8%	11
Collaboration - my advice was sought and my advice and recommendations were incorporated into decisions made	5.1%	31
Empowerment - my decisions were implemented	0.8%	5
	Total responses	**605**



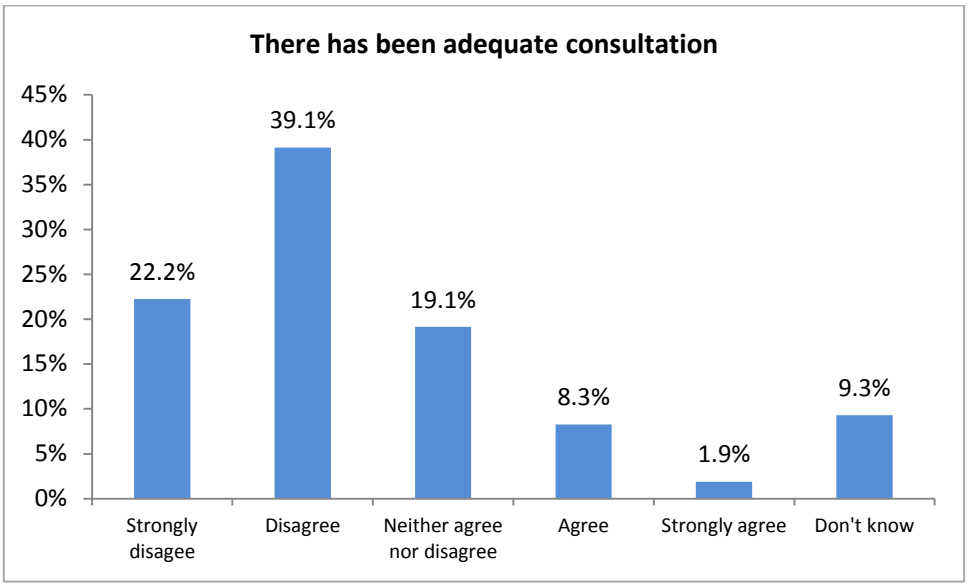
17.2 Consultation Meeting Needs

Did the level of engagement meet your needs		
	Response Percent	**Response Count**
Not at all	43.3%	155
Partially	39.9%	143
Substantially	13.1%	47
Completely	3.6%	13
	Total responses	**358**



There has been adequate consultation between government and the implementers of the PCEHR and the key user groups including consumers, health information/informatics professionals and clinicians.

There has been adequate consultation		
	Response Percent	**Response Count**
Strongly disagree	22.2%	129
Disagree	**39.1%**	**227**
Neither agree nor disagree	19.1%	111
Agree	8.3%	48
Strongly agree	1.9%	11
Don't know	9.3%	54
	Total responses	**643**

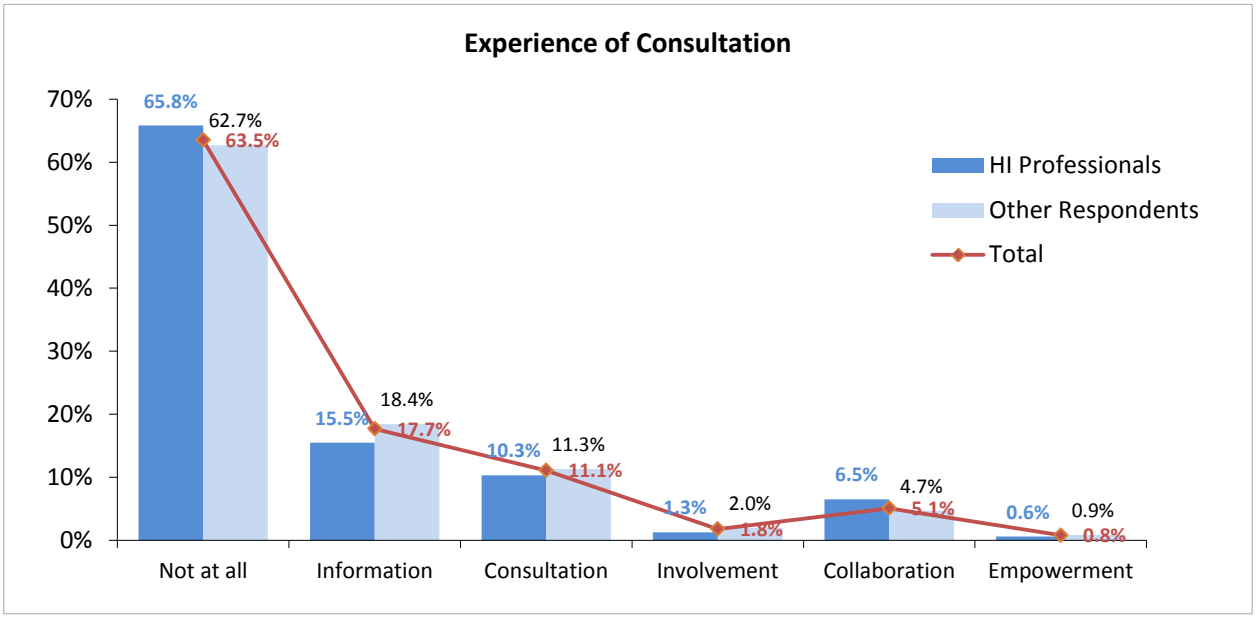


17.3 Comments - Consultation

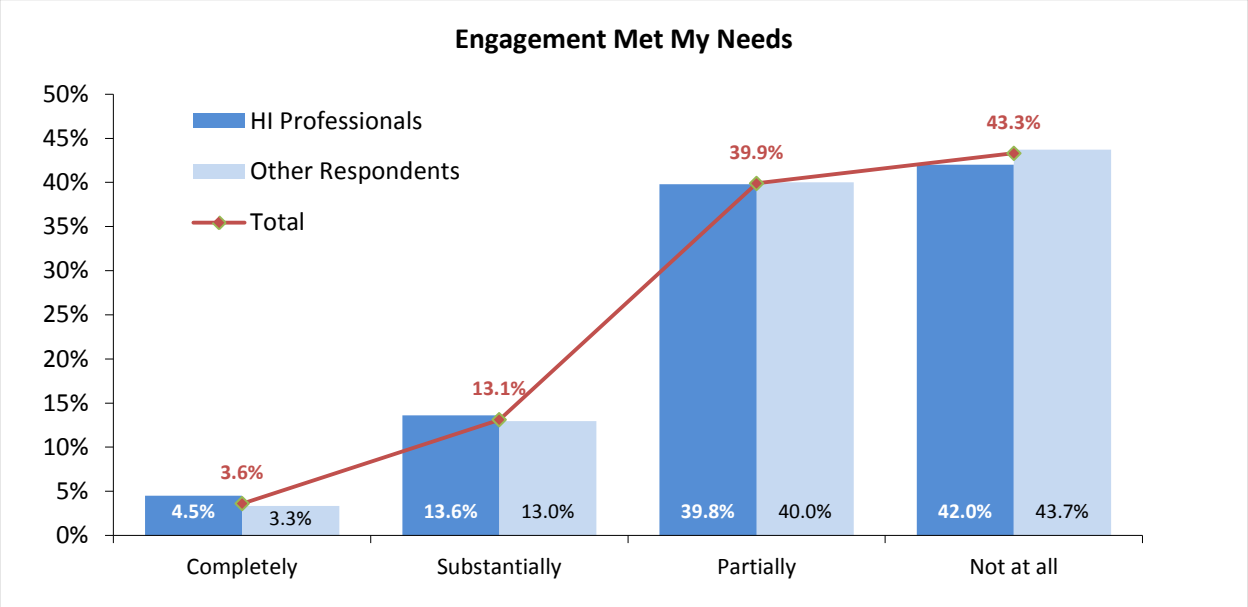
216 individuals responses are available for further analysis.

17.4 Consultation – HI Professionals

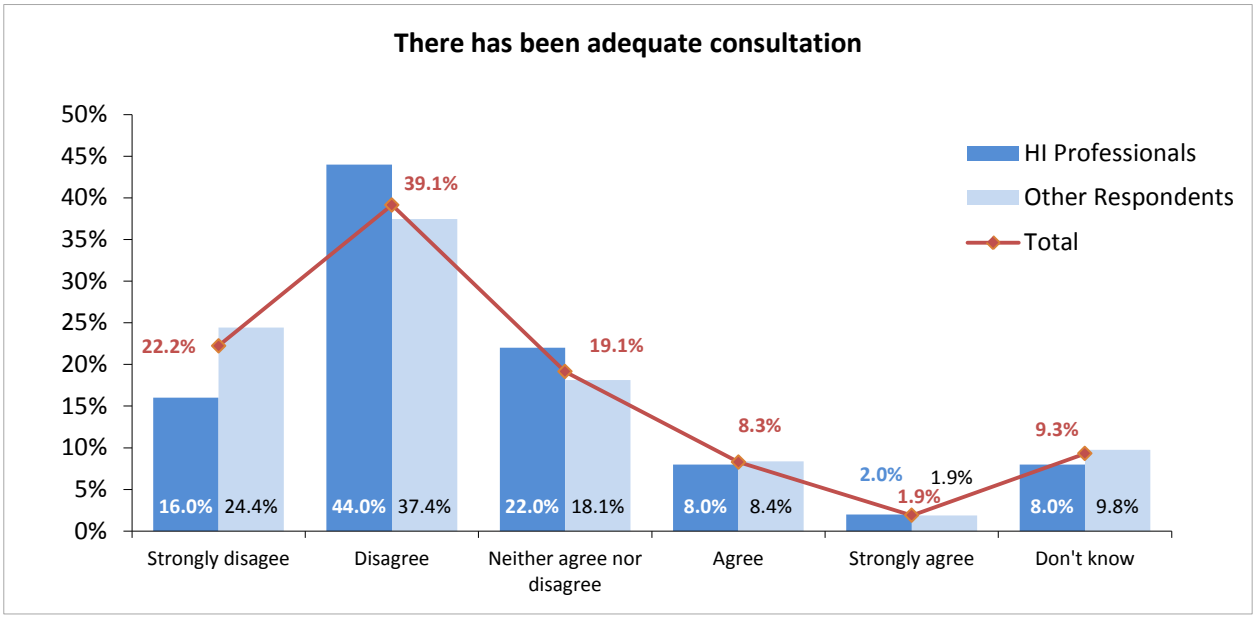
I was directly engaged by the government, NEHTA, contractors or representative bodies (eg - the AMA) to comment on or participate in the PCEHR program of work at the following levels						
	HI Professionals		Other Respondents		Total	
	Response Percent	Response Count	Response Percent	Response Count	Response Percent	Response Count
Not at all	65.8	102	62.7%	282	63.5%	384
Information	**15.5**	**24**	**18.4%**	**83**	**17.7%**	**107**
Consultation	10.3	16	11.3%	51	11.1%	67
Involvement	1.3	2	2.0%	9	1.8%	11
Collaboration	6.5	10	4.7%	21	5.1%	31
Empowerment	0.6	1	0.9%	4	0.8%	5
Total responses		**155**		**450**		**605**



This engagement met my needs						
	HI Professionals		Other Respondents		Total	
	Response Percent	Response Count	Response Percent	Response Count	Response Percent	Response Count
Completely	4.5%	4	3.3%	9	3.6%	13
Substantially	13.6%	12	13.0%	35	13.1%	47
Partially	39.8%	35	40.0%	108	39.9%	143
Not at all	**42.0%**	**37**	**43.7%**	**118**	**43.3%**	**155**
Total responses		**88**		**270**		**358**



There has been adequate consultation between government and the implementers of the PCEHR and the key user groups including consumers, health information/informatics professionals and clinicians						
	HI Professionals		Other Respondents		Total	
	Response Percent	Response Count	Response Percent	Response Count	Response Percent	Response Count
Strongly disagree	16.0%	24	24.4%	105	22.2%	129
Disagree	44.0%	66	37.4%	161	39.1%	227
Neither agree nor disagree	22.0%	33	18.1%	78	19.1%	111
Agree	8.0%	12	8.4%	36	8.3%	48
Strongly agree	2.0%	3	1.9%	8	1.9%	11
Don't know	8.0%	**12**	9.8%	42	9.3%	54
Total responses		**150**		**430**		**580**



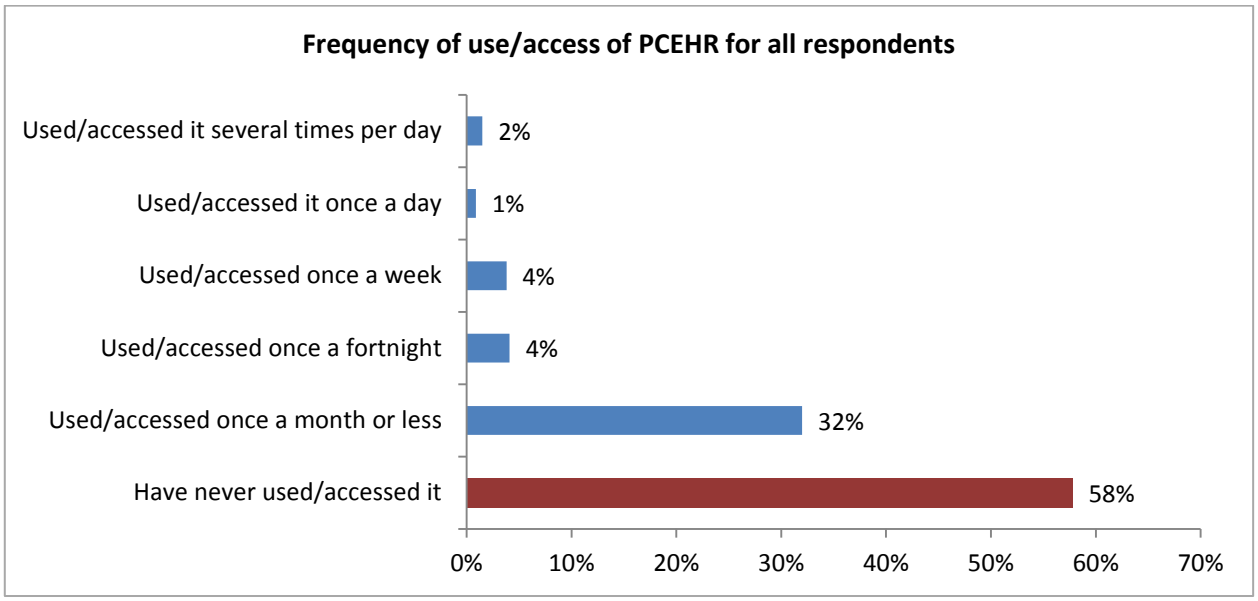
18.0 Use

Terms of Reference	The level of use of the PCEHR by healthcare professions in clinical settings

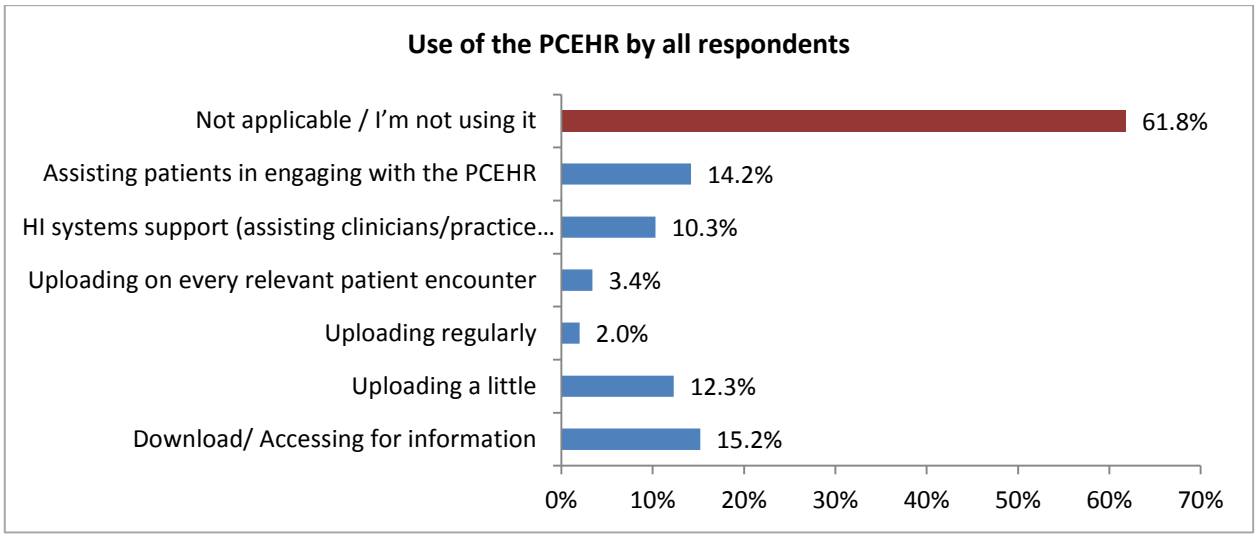
18.1 Use of PCEHR by all Respondents

Question is for healthcare professionals/clinicians only. 341 people responded but not all were clinicians.

Frequency of use/access of PCEHR for all respondents		
	Response Percent	**Response Count**
Have never used/accessed it	57.8%	197
Used/accessed once a month or less	32.0%	109
Used/accessed once a fortnight	4.1%	14
Used/accessed once a week	3.8%	13
Used/accessed it once a day	0.9%	3
Used/accessed it several times per day	1.5%	5
	Total responses	**341**



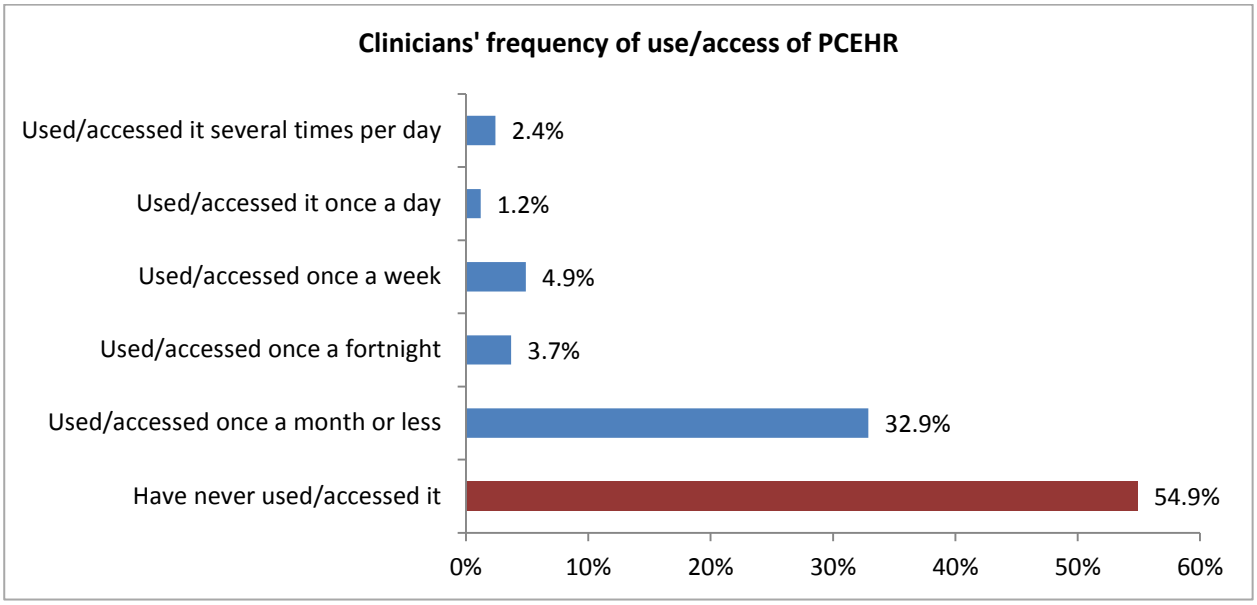
Use of the PCEHR by all respondents		
	Response Percent	**Response Count**
Download/ Accessing for information	15.2%	31
Uploading a little	12.3%	25
Uploading regularly	2.0%	4
Uploading on every relevant patient encounter	3.4%	7
HI systems support (assisting clinicians/practice managers)	10.3%	21
Assisting patients in engaging with the PCEHR	14.2%	29
Not applicable / I'm not using it	61.8%	126
	Total responses	**204**



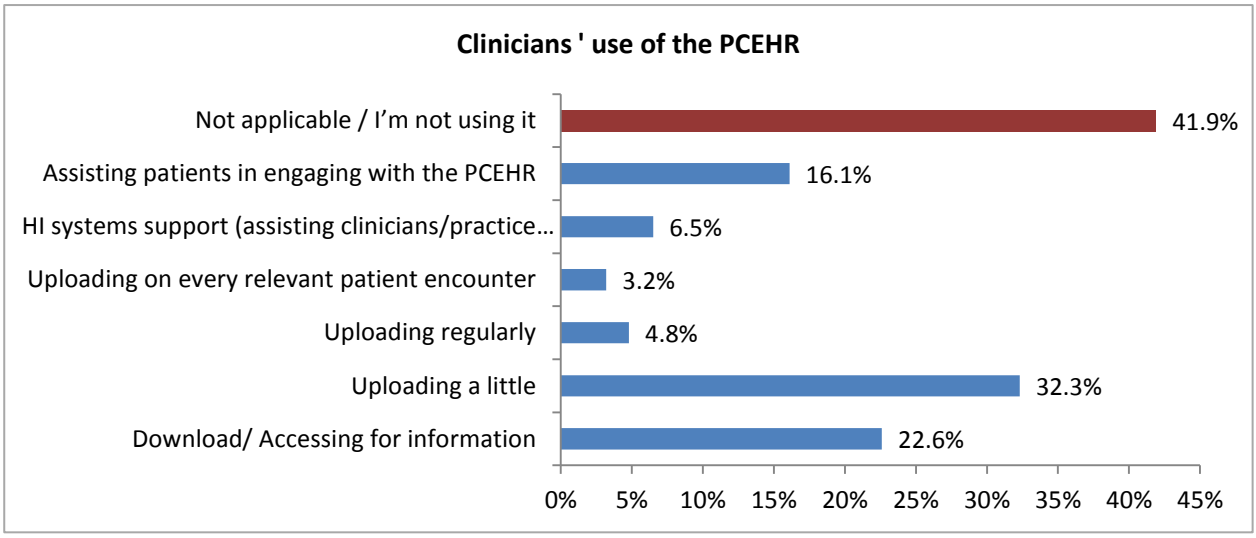
18.2 Clinicians' use of PCEHR

Below are responses for clinicians only….

Clinicians' frequency of use/access of PCEHR		
	Response Percent	**Response Count**
Have never used/accessed it	54.9%	45
Used/accessed once a month or less	32.9%	27
Used/accessed once a fortnight	3.7%	3
Used/accessed once a week	4.9%	4
Used/accessed it once a day	1.2%	1
Used/accessed it several times per day	2.4%	2
	Total responses	***82***

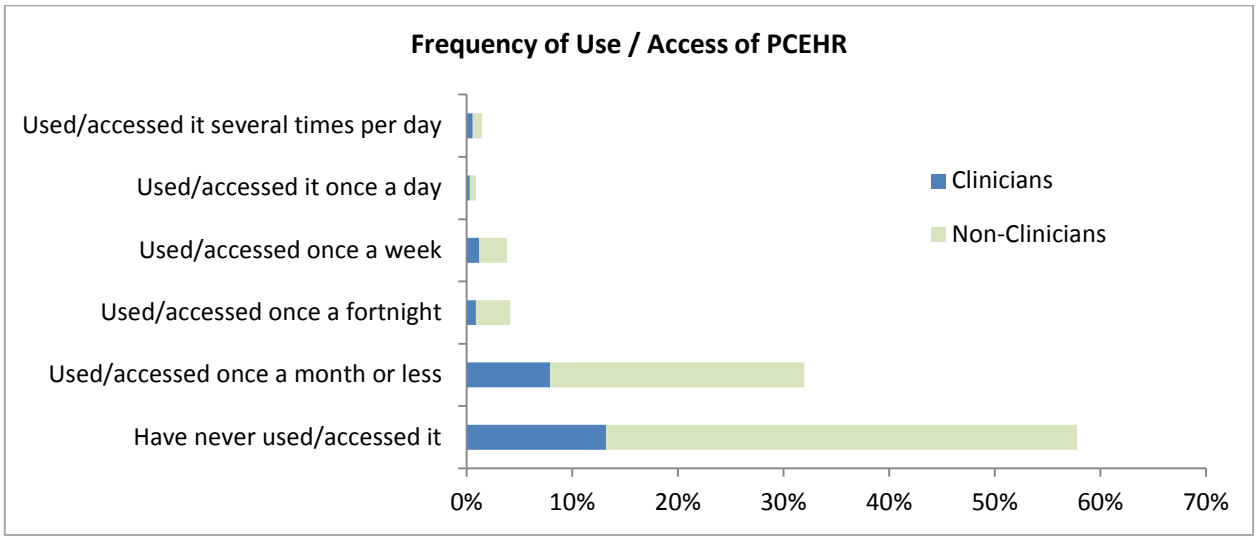


Clinicians' use of the PCEHR		
	Response Percent	**Response Count**
Download/ Accessing for information	22.6%	14
Uploading a little	32.3%	20
Uploading regularly	4.8%	3
Uploading on every relevant patient encounter	3.2%	2
HI systems support (assisting clinicians/practice managers)	6.5%	4
Assisting patients in engaging with the PCEHR	16.1%	10
Not applicable / I'm not using it	41.9%	26
	Total responses	**62**

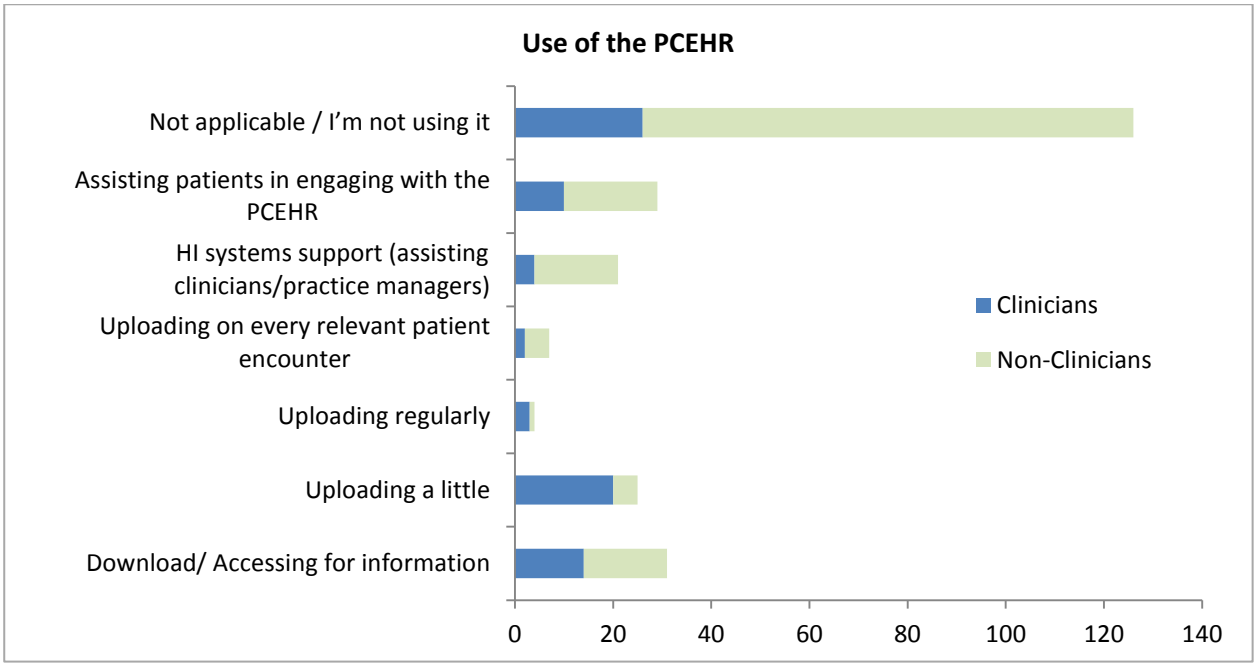


18.3 Clinician vs Non-Clinician Respondents Use of PCEHR

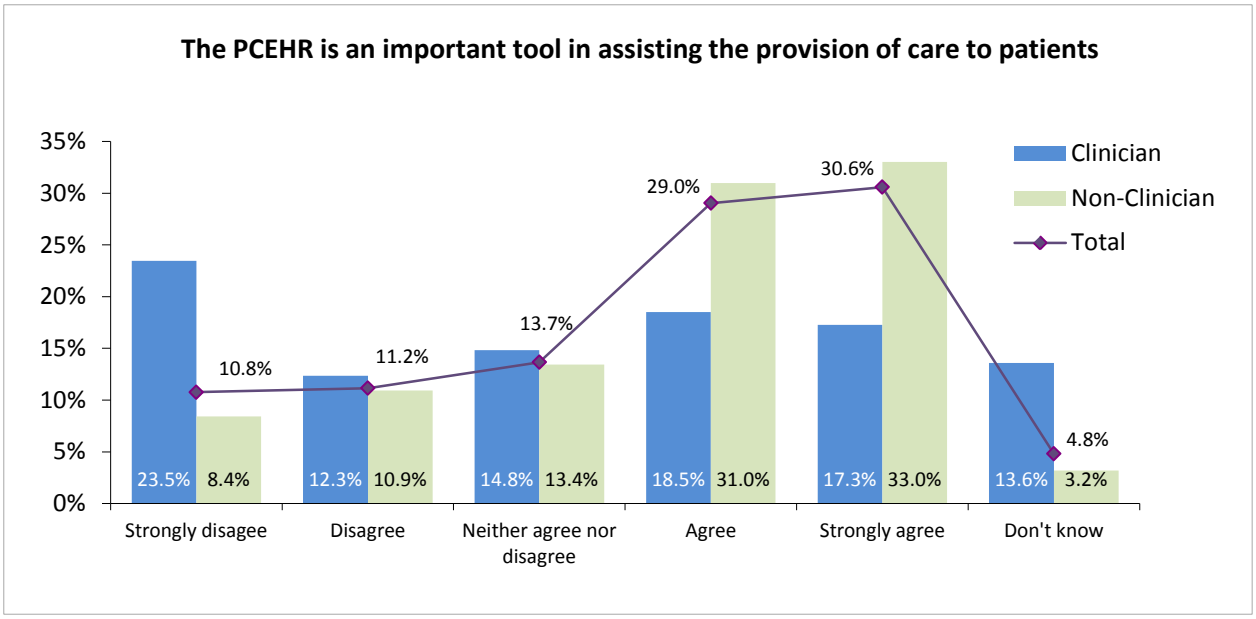
Frequency of use/access of PCEHR					
	Clinicians		**Non-Clinicians**		**Total**
	Response Percent	**Response Count**	**Response Percent**	**Response Count**	**Response Count**
Have never used/accessed it	13.2%	45	44.6%	152	197
Used/accessed once a month or less	7.9%	27	24.0%	82	109
Used/accessed once a fortnight	0.9%	3	3.2%	11	14
Used/accessed once a week	1.2%	4	2.6%	9	13
Used/accessed it once a day	0.3%	1	0.6%	2	3
Used/accessed it several times per day	0.6%	2	0.9%	3	5
Total responses	**24.0%**	**82**	**76.0%**	**259**	**341**



Use of the PCEHR			
	Clinicians	Non-Clinicians	Total
	Response Count	Response Count	Response Count
Download/ Accessing for information	14	17	31
Uploading a little	20	5	25
Uploading regularly	3	1	4
Uploading on every relevant patient encounter	2	5	7
HI systems support (assisting clinicians/practice managers)	4	17	21
Assisting patients in engaging with the PCEHR	10	19	29
Not applicable / I'm not using it	26	100	126
Total responses	**62**	**142**	**204**



The PCEHR is an important tool in assisting the provision of care to patients						
	Clinician		Non-Clinician		Total	
	Response Percent	Response Count	Response Percent	Response Count	Response Percent	Response Count
Strongly disagree	23.5%	19	8.4%	37	10.8%	56
Disagree	12.3%	10	10.9%	48	11.2%	58
Neither agree nor disagree	14.8%	12	13.4%	59	13.7%	71
Agree	**18.5%**	**15**	**31.0%**	**136**	**29.0%**	**151**
Strongly agree	**17.3%**	**14**	**33.0%**	**145**	**30.6%**	**159**
Don't know	13.6%	11	3.2%	14	4.8%	25
Total responses		**81**		**439**		**520**



18.4 Comments - Use

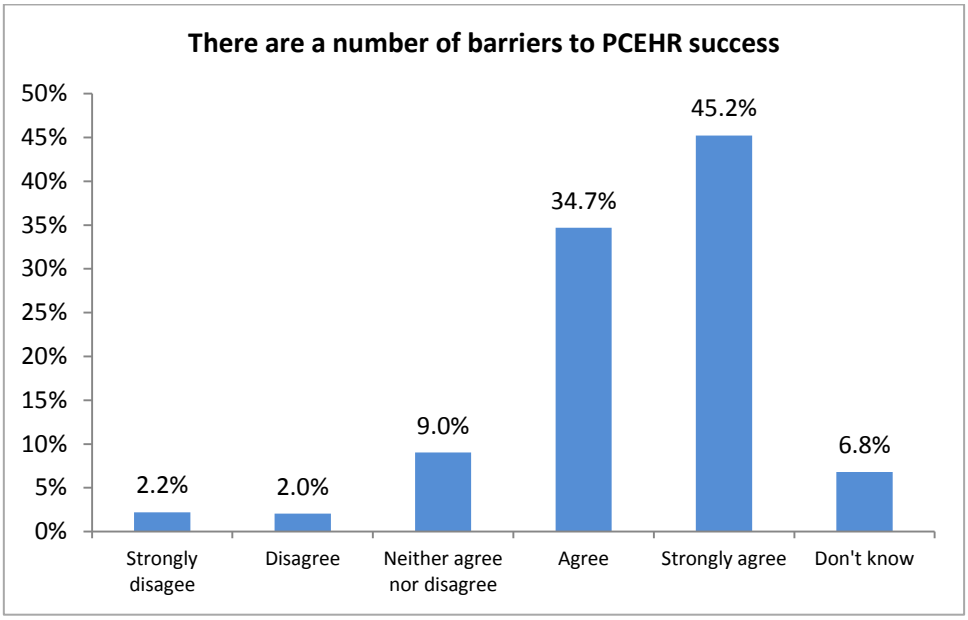
197 individuals responses are available for further analysis.

19.0 Barriers

Terms of Reference	Barriers to increasing usage in clinical settings

There are a number of barriers to the ultimate success of the PCEHR system as currently designed.

There are a number of barriers to the ultimate success of the PCEHR system as currently designed		
	Response Percent	**Response Count**
Strongly disagree	2.2%	13
Disagree	2.0%	12
Neither agree nor disagree	9.0%	53
Agree	**34.7%**	**204**
Strongly agree	**45.2%**	**266**
Don't know	6.8%	40
Total responses		**588**



19.1 Comments - Barriers

What barriers exist for you / your profession?
388 individuals responded, 1593 comments are available for further analysis.

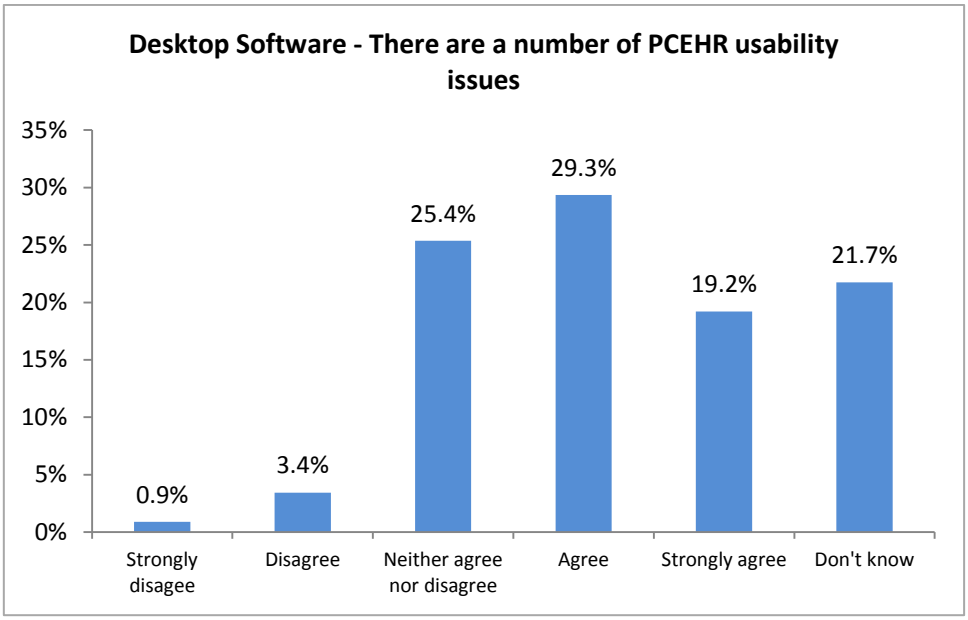
20.0 Usability

Terms of Reference	Key clinician and patient usability issues

20.1 PCEHR - Clinical Desktop Software

There are a number of usability issues in relation to the use of PCEHR system (the PCEHR as it is accessed through clinical desktop software) as currently designed.

There are a number of usability issues in relation to the use of PCEHR system (clinical desktop software) as currently designed		
	Response Percent	**Response Count**
Strongly disagree	0.9%	5
Disagree	3.4%	19
Neither agree nor disagree	25.4%	140
Agree	**29.3%**	**162**
Strongly agree	19.2%	106
Don't know	21.7%	120
Total responses		**552**



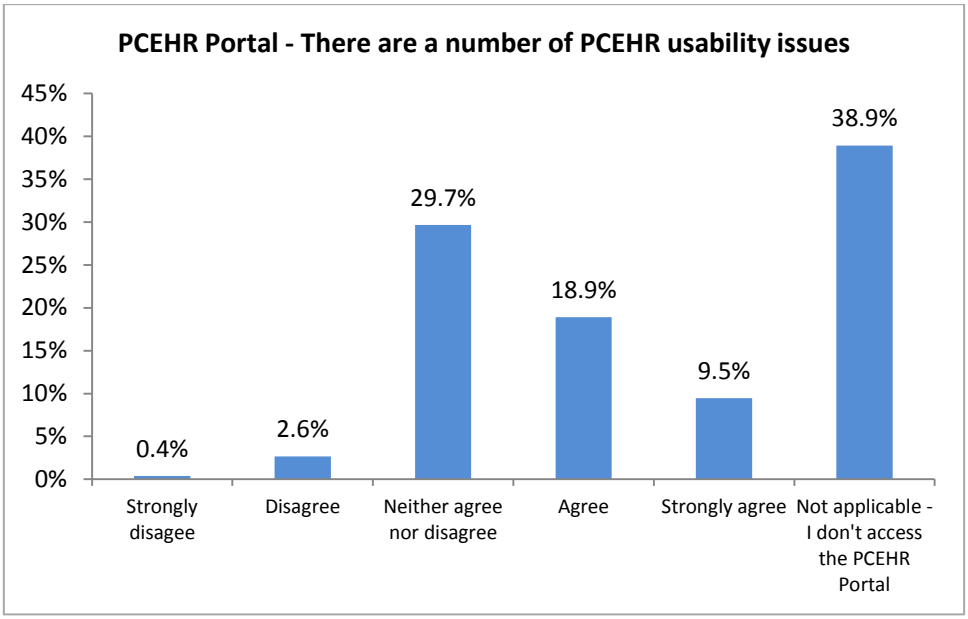
20.2 Comments – Usability of PCEHR

What usability issues exist for you / your profession in using the PCEHR?
203 individuals responded, 471 comments are available for further analysis.

20.3 PCEHR - Portal

There are a number of usability issues in relation to the use of PCEHR PORTAL (the PCEHR as it is accessed through the web portal) as currently designed.

There are a number of usability issues in relation to the use of PCEHR system (clinical desktop software) as currently designed		
	Response Percent	**Response Count**
Strongly disagree	0.4%	2
Disagree	2.6%	14
Neither agree nor disagree	29.7%	157
Agree	18.9%	100
Strongly agree	9.5%	50
Not applicable - I don't access the PCEHR Portal	**38.9%**	**206**
Total responses		**529**



20.4 Comments – Usability of PCEHR Portal

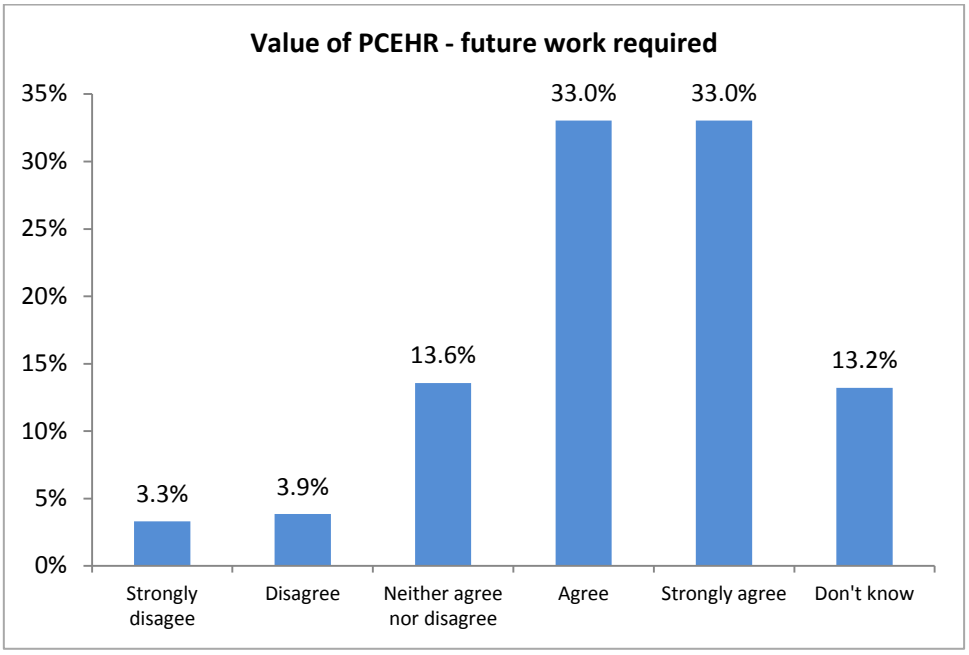
What usability issues exist for you / your profession in using the PCEHR Portal?
90 individuals responded, 249 comments are available for further analysis

21.0 Future Work

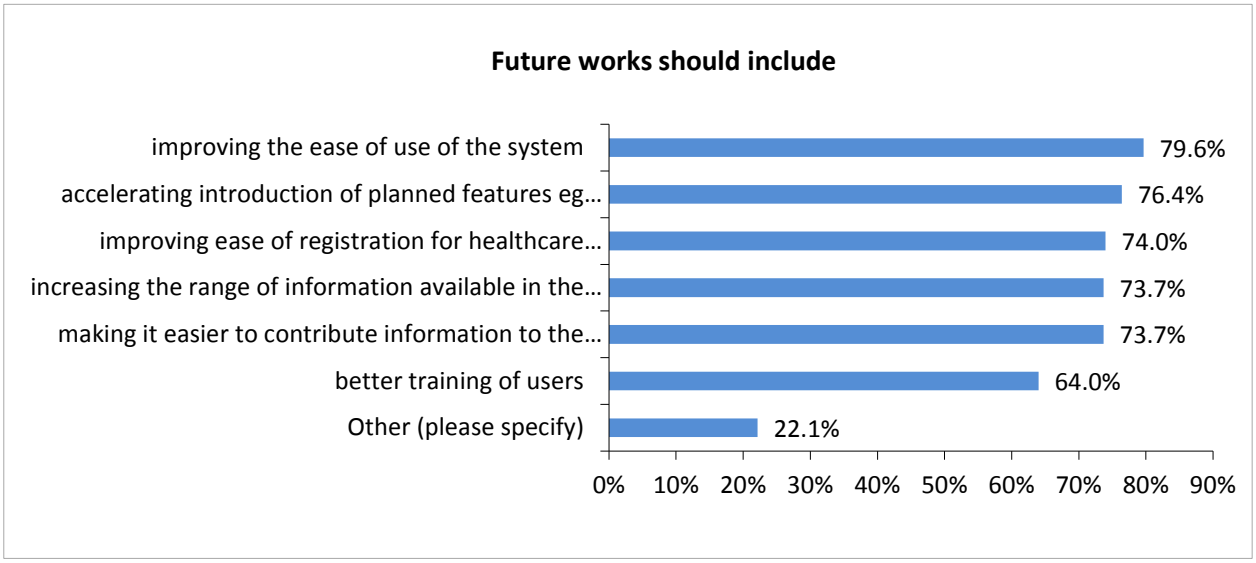
Terms of Reference	Work that is still required including new functions that improve the value proposition for clinicians and patients

There are works that if undertaken will see the PCEHR as a valuable addition to the healthcare delivery environment in Australia.

Value of PCEHR – future work required		
	Response Percent	**Response Count**
Strongly disagree	3.3%	18
Disagree	3.9%	21
Neither agree nor disagree	13.6%	74
Agree	**33.0%**	**180**
Strongly agree	**33.0%**	**180**
Don't know	13.2%	72
Total responses		**545**



Future works should include		
	Response Percent	**Response Count**
Improving the ease of use of the system	79.6%	270
Accelerating introduction of planned features eg pathology, radiology etc	76.4%	259
Improving ease of registration for healthcare service providers	74.0%	251
Making it easier to contribute information to the system	73.7%	250
Increasing the range of information available in the system	73.7%	250
Better training of users	64.0%	217
Other	22.1%	75
Total responses		**339**



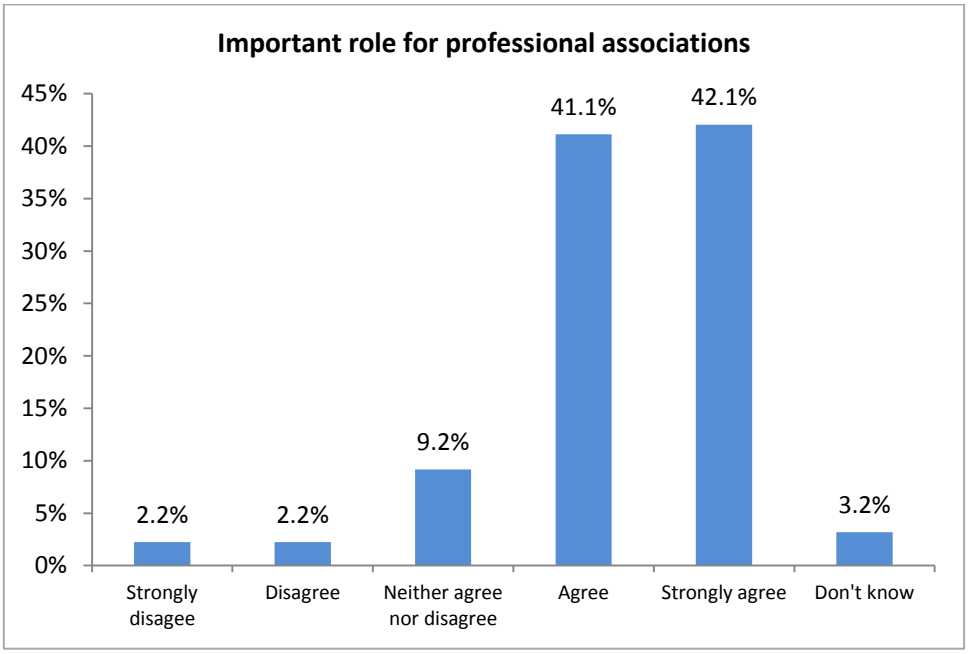
21.1 Comments – Future Work

75 comments are available for further analysis.

21.2 Role for Professional Associations

There is an important role for professional associations (clinical and e-health sector) in providing education, training, and engagement to the PCEHR's critical stakeholders.

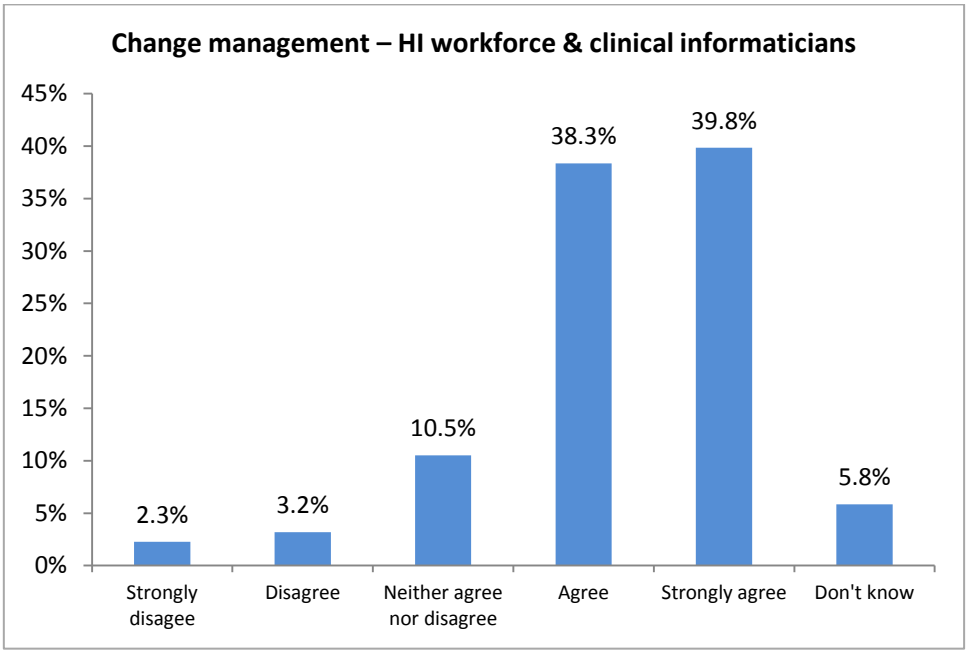
Role for professional associations		
	Response Percent	**Response Count**
Strongly disagree	2.2%	12
Disagree	2.2%	12
Neither agree nor disagree	9.2%	49
Agree	**41.1%**	**220**
Strongly agree	**42.1%**	**225**
Don't know	3.2%	17
Total responses		**535**



21.3 Change Management – HI Workforce & Clinical Informaticians

Change management engagement between Australia's skilled health informatics/information management workforce and clinical informaticians will add essential value to future work.

Change management – HI workforce & clinical informaticians		
	Response Percent	**Response Count**
Strongly disagree	2.3%	12
Disagree	3.2%	17
Neither agree nor disagree	10.5%	56
Agree	**38.3%**	**204**
Strongly agree	**39.8%**	**212**
Don't know	5.8%	31
Total responses		**532**



21.4 Comments – Future Work

98 comments are available for further analysis.

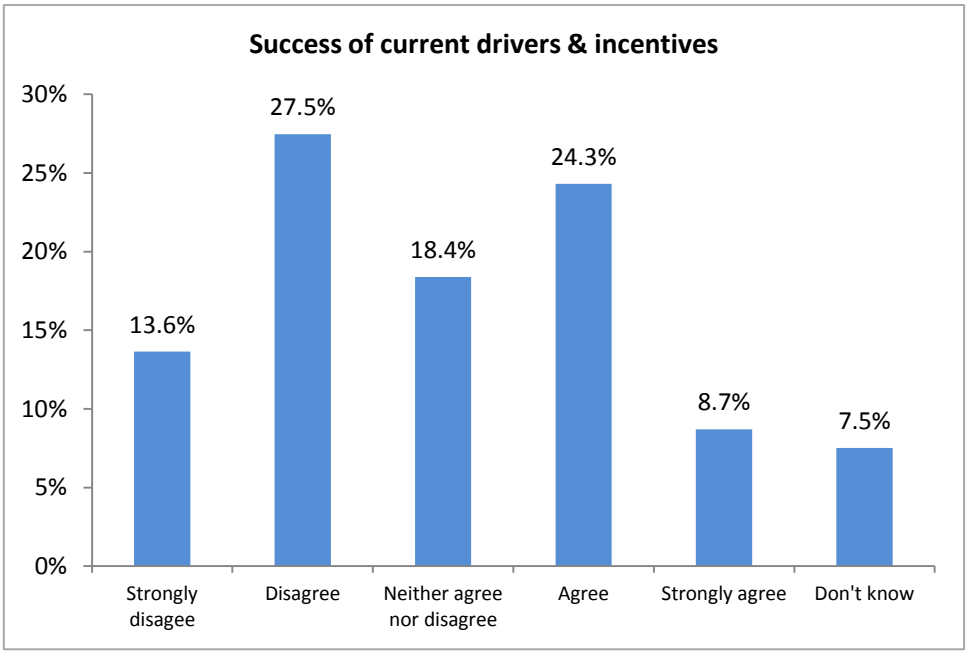
22.0 Drivers and Incentives

Terms of Reference	Drivers and incentives to increase usage for both industry and health care professionals Suggested improvements to accelerate adoption of the platform

22.1 Success of Current Drivers and Incentives

Based on current trends, existing drivers and incentives will see the PCEHR roll out result in successful system implementation AND the delivery of better healthcare to Australians.

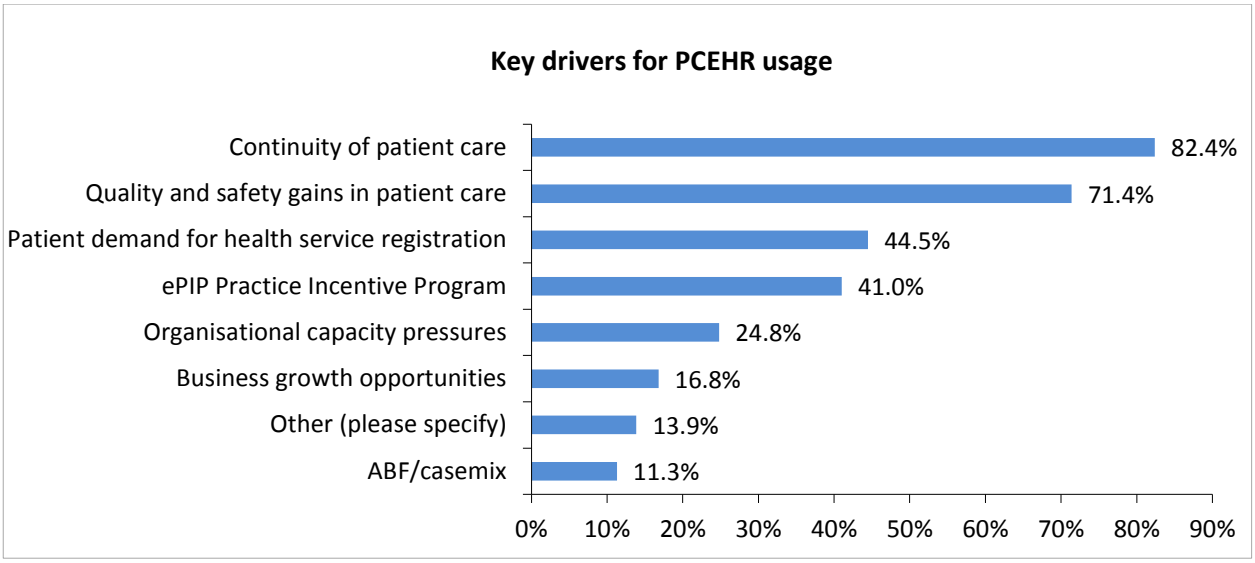
Success of current drivers & incentives		
	Response Percent	**Response Count**
Strongly disagree	13.6%	69
Disagree	**27.5%**	**139**
Neither agree nor disagree	18.4%	93
Agree	**24.3%**	**123**
Strongly agree	8.7%	44
Don't know	7.5%	38
Total responses		**506**



22.2 Key Drivers

What do you believe are the key drivers to usage of the PCEHR?

What do you believe are the key drivers to usage of the PCEHR?		
	Response Percent	**Response Count**
Continuity of patient care	82.4%	392
Quality and safety gains in patient care	71.4%	340
Patient demand for health service registration	44.5%	212
ePIP Practice Incentive Program	41.0%	195
Organisational capacity pressures	24.8%	118
Business growth opportunities	16.8%	80
Other (please specify)	13.9%	66
ABF/casemix	11.3%	54
Total responses		**476**



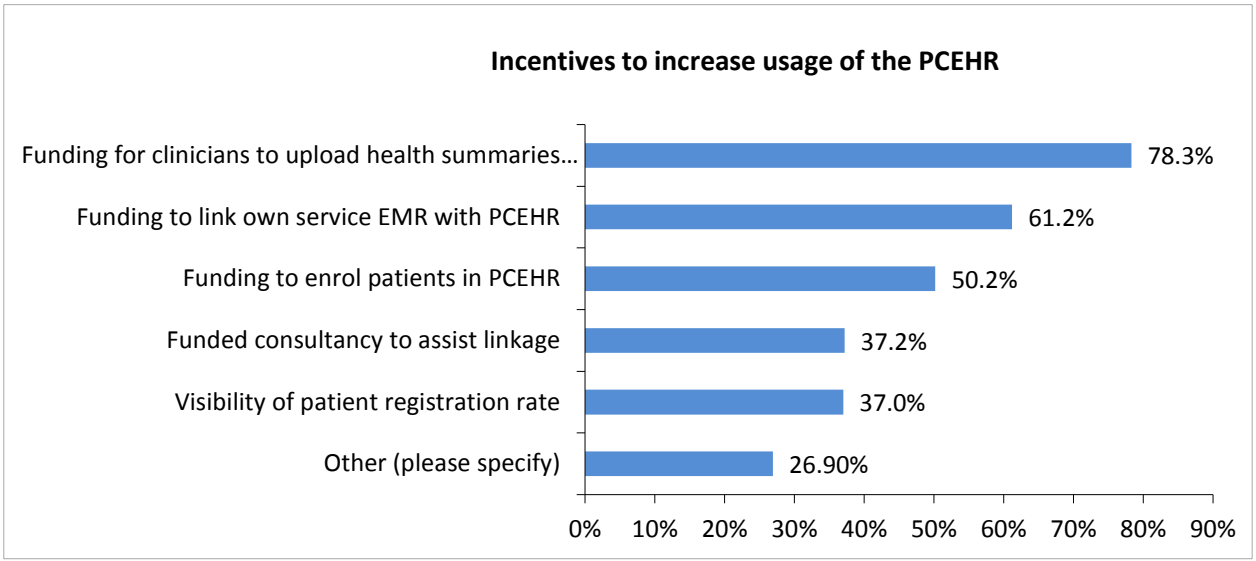
22.3 Comments - Drivers

Other drivers - 66 comments are available for further analysis.

22.4 Incentives

What incentives do you believe would increase usage of the PCEHR?

Incentives to increase usage of the PCEHR		
	Response Percent	**Response Count**
Funding for clinicians to upload health summaries and actually use the PCEHR	78.3%	349
Funding to link own service EMR with PCEHR	61.2%	273
Funding to enrol patients in PCEHR	50.2%	224
Funded consultancy to assist linkage	37.2%	166
Visibility of patient registration rate	37.0%	165
Other (please specify)	26.90%	120
Total responses		**446**



22.5 Comments - Incentives

Other Incentives -120 comments are available for further analysis.

22.6 Improvements

What improvements do you suggest which will accelerate adoption of the PCEHR and result in successful system implementation AND the delivery of better healthcare to Australians?

Suggested improvements		
	Response Percent	**Response Count**
Chronic disease management	64.1%	302
Medication management	61.6%	290
Pathology	60.7%	286
Improve usability	60.5%	285
Improve accessibility - ability to input into the PCEHR is currently restricted to health professionals with compliant practice software	58.4%	275
Diagnostic imaging	56.3%	265
Increase engagement and education of benefits	56.3%	265
Opt-out for consumers/patients	47.1%	222
PCEHR Portal to have a 'write' function (currently the portal is read-only for clinicians)	47.1%	222
Complete roll out of current program	34.6%	163
Opt-out for healthcare professionals/clinicians	33.8%	159
Australian Medicines Terminology	26.3%	124
Other (please specify)	15.90%	75
Total responses		**471**

22.7 Comments - Improvements

Other improvements -75 comments are available for further analysis.
Other comments on incentives & drivers - 63 comments are available for further analysis.

22.8 Six Focus Areas for Future Work

We would like you to consider a scenario where you are given the opportunity to determine the six key practical things that should be focused on and completed by mid-2016 in order to significantly improve the value proposition and usability of the PCEHR for clinicians and patients.

In doing this please:

- Provide these practical things in the context of your understanding and experience with the current PCEHR implementation arrangements and how these can be rapidly improved, or, built upon
- Describe these practical things succinctly
- Do not suggest things which are likely to require significant investment, long lead times and require major complexity to be addressed in order to achieve results

Comments
284 individuals responded, 1122 comments are available for further analysis

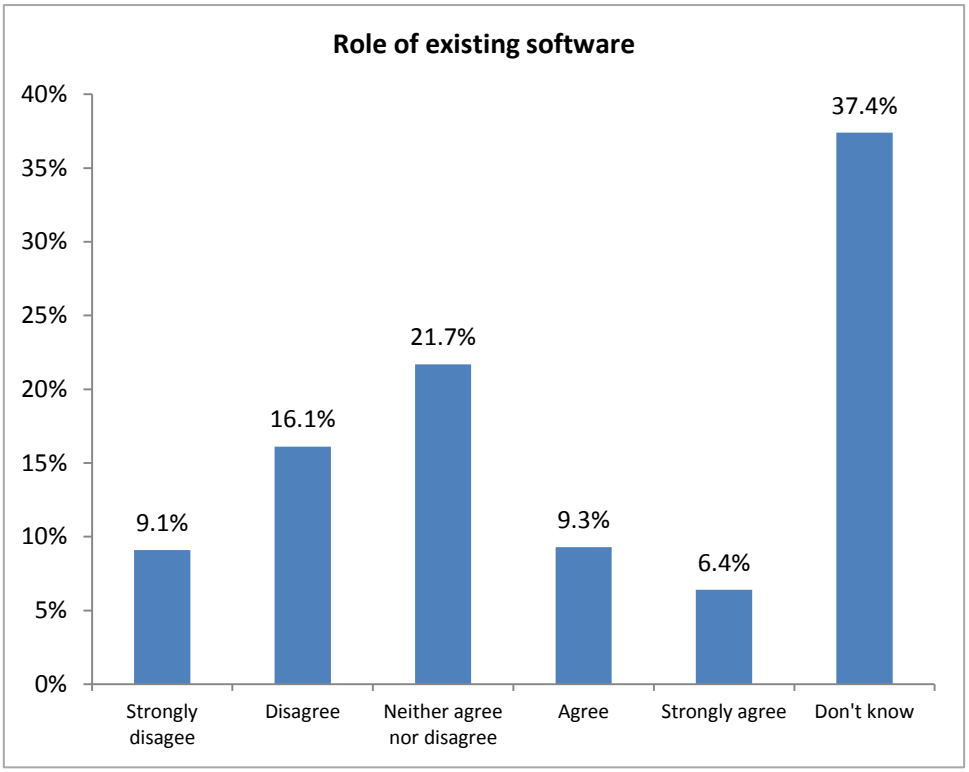
23.0 Private Sector

Terms of Reference	The applicability and potential integration of comparable private sector products
	The future role of the private sector in providing solutions
	The policy settings required to generate private sector solutions

23.1 Role of Existing Products

Respondents were asked their level of agreement with the statement "There is an existing software product that I believe can fulfil the role that the current PCEHR system fills".

Role of existing software in fulfilling current PCEHR role		
	Response Percent	**Response Count**
Strongly disagree	9.1%	44
Disagree	16.1%	78
Neither agree nor disagree	21.7%	105
Agree	9.3%	45
Strongly agree	6.4%	31
Don't know	**37.4%**	**181**
Total responses		**484**



Respondents were asked to provide the name of existing software products they believe can fulfil the role that the current PCEHR system fills. There were 53 individual responses.

Existing product suggestions	Response count
Amalga	1
AutumnCare	1
Best Practice	6
cDM Net	1
Dr Info	2
Emerging Systems EHS	2
Extensia	2
Genie	1
Google Health	1
HealthKit	1
Instant Health Record	1
Intersystems Healthshare	3
MDM solutions	1
Medenotes	3
Medical Director	2
Microsoft HealthVault	3
Mmex	1
My Carebook	1
My eHealth record (NT) /OpenEHR Ocean Informatics	5
OACIS	1
Oracle Healthcare Transaction Base	1
Patients Know Best	1
Shared EHRs managed by local health communities	1
Smart Health Solutions	3
Stat health	2
tcm - The Care Manager	1

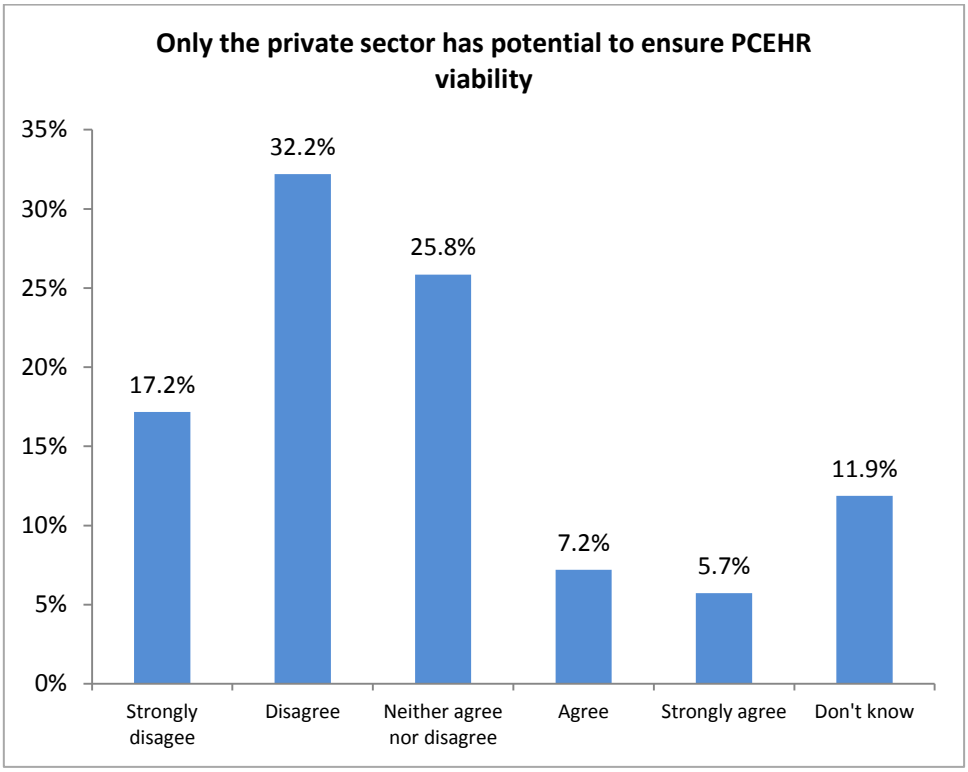
Comments

- There are multiple products now, in various stages of capability
- too many to name, many have partial services
- Various - and they will continue to proliferate in response to specific market demands and models of meaningful use
- We need to be looking at what the USA is doing
- Web based products for tablets for the GP, Hospital, Aged Care, Community Health that are properly integrated

23.2 Role for the Private Sector

Only the private sector has the potential to ensure the ongoing rollout and viability of the PCEHR by hosting the system and managing the data it holds.

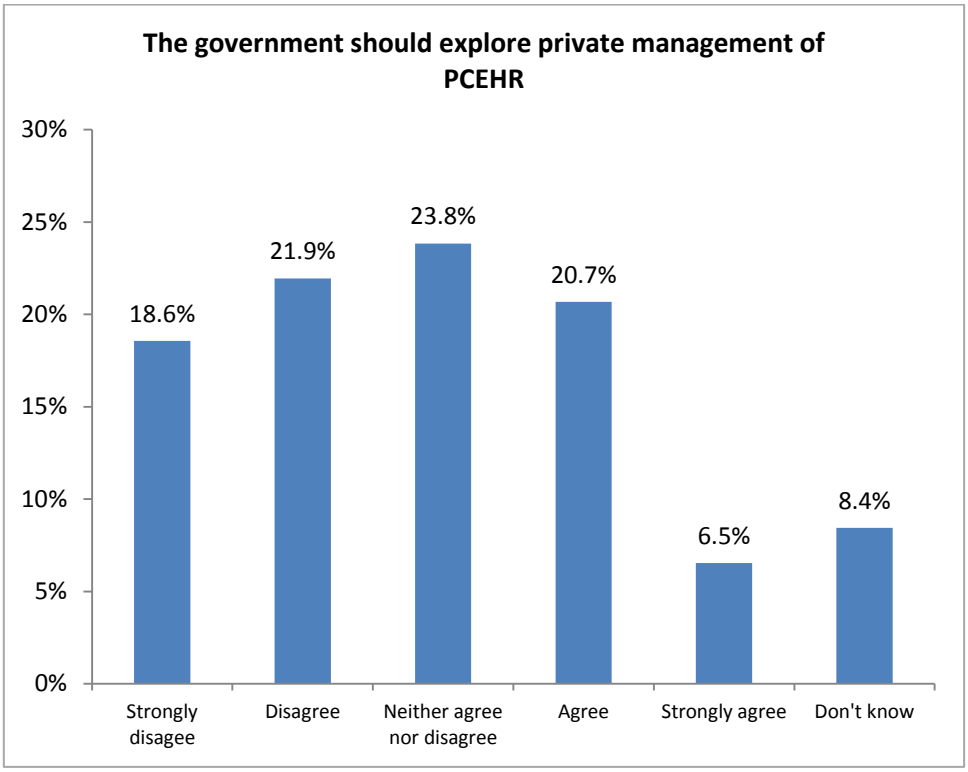
Only the private sector has potential to ensure PCEHR viability		
	Response Percent	**Response Count**
Strongly disagree	17.2%	81
Disagree	**32.2%**	**152**
Neither agree nor disagree	25.8%	122
Agree	7.2%	34
Strongly agree	5.7%	27
Don't know	11.9%	56
Total responses		**472**



23.3 Role of Private Sector Management & Control

I believe the government should explore the possibility of allowing part or all of the PCEHR software platform to be managed under private control.

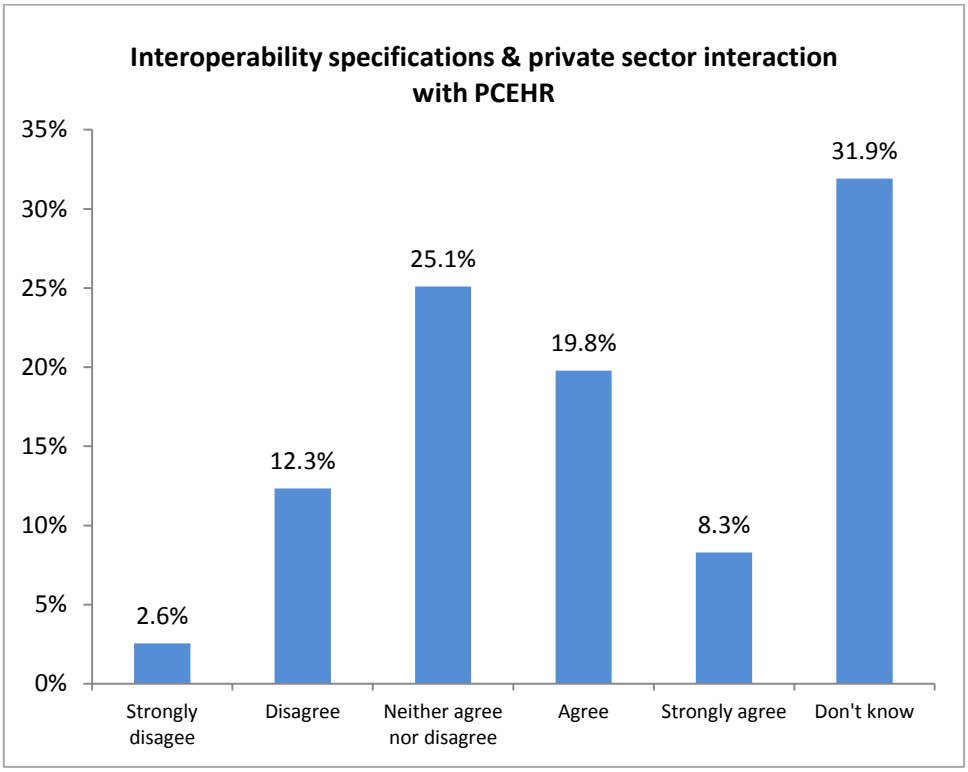
The government should explore private management of PCEHR		
	Response Percent	**Response Count**
Strongly disagree	18.6%	88
Disagree	21.9%	104
Neither agree nor disagree	**23.8%**	**113**
Agree	20.7%	98
Strongly agree	6.5%	31
Don't know	8.4%	40
Total responses		**474**



23.4 Interoperability Specifications

In my experience, the PCEHR interoperability specifications do not allow private sector software providers to interact adequately with it.

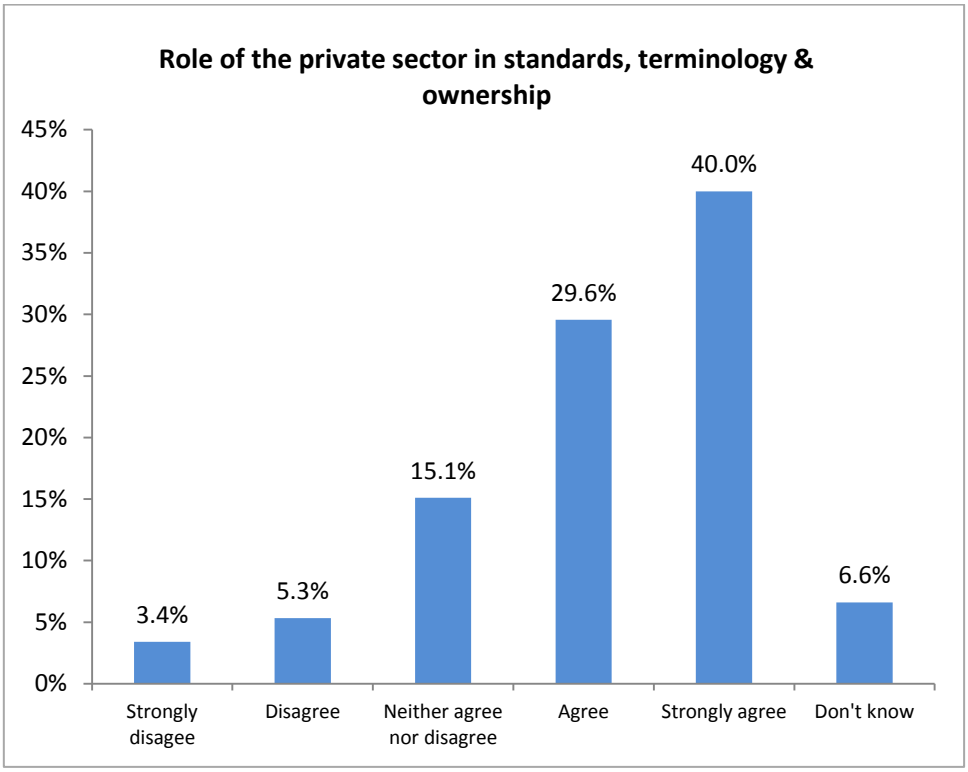
Interoperability specifications & private sector interaction with PCEHR		
	Response Percent	**Response Count**
Strongly disagree	2.6%	12
Disagree	12.3%	58
Neither agree nor disagree	**25.1%**	**118**
Agree	19.8%	93
Strongly agree	8.3%	39
Don't know	31.9%	150
Total responses		**470**



23.5 Role of the Private Sector in Standards, Terminology & Ownership

Some elements of the PCEHR, such as standards, medical terminology, clinical classifications and ownership of the record, should never be proprietary of the private sector

Role of the private sector in standards, terminology & ownership		
	Response Percent	**Response Count**
Strongly disagree	3.4%	16
Disagree	5.3%	25
Neither agree nor disagree	15.1%	71
Agree	29.6%	139
Strongly agree	**40.0%**	**188**
Don't know	6.6%	31
Total responses		**470**



23.6 Comments – Role of Private Sector

Any comments you would like to add on the role of the private sector and policy settings required to generate private sector solutions…
76 comments are available for further analysis

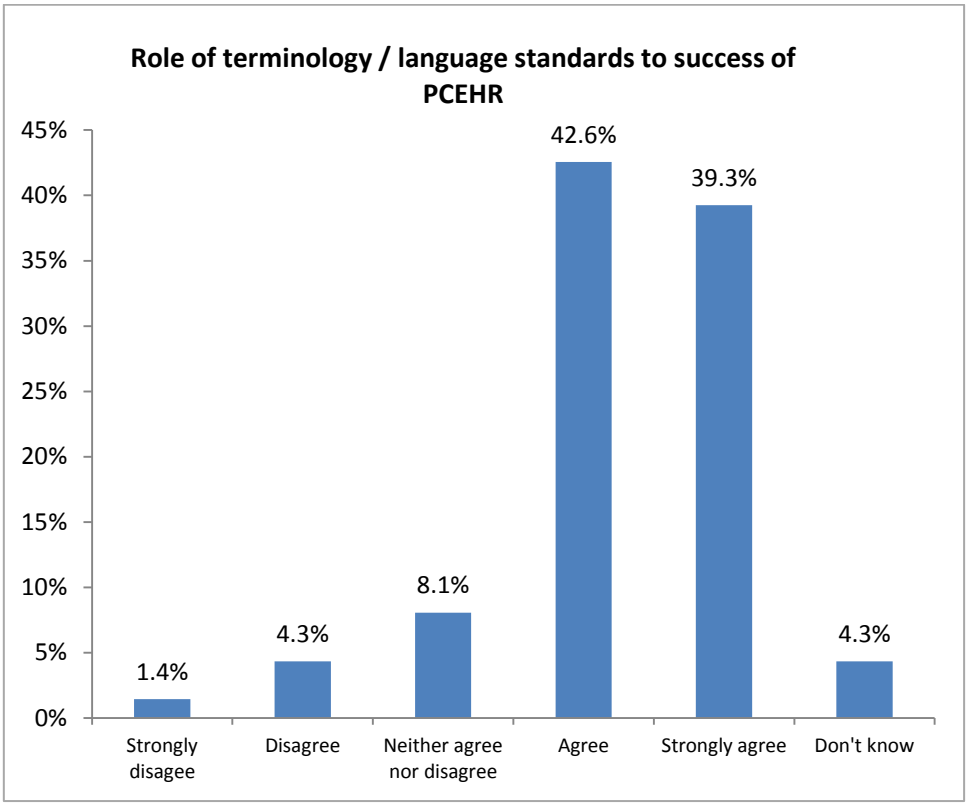
24.0 Standards

Submission Invitation	Comments on standards for Terminology, language and technology

24.1 Role of Standards

The role of standards for terminology / language is paramount to the success of the PCEHR.

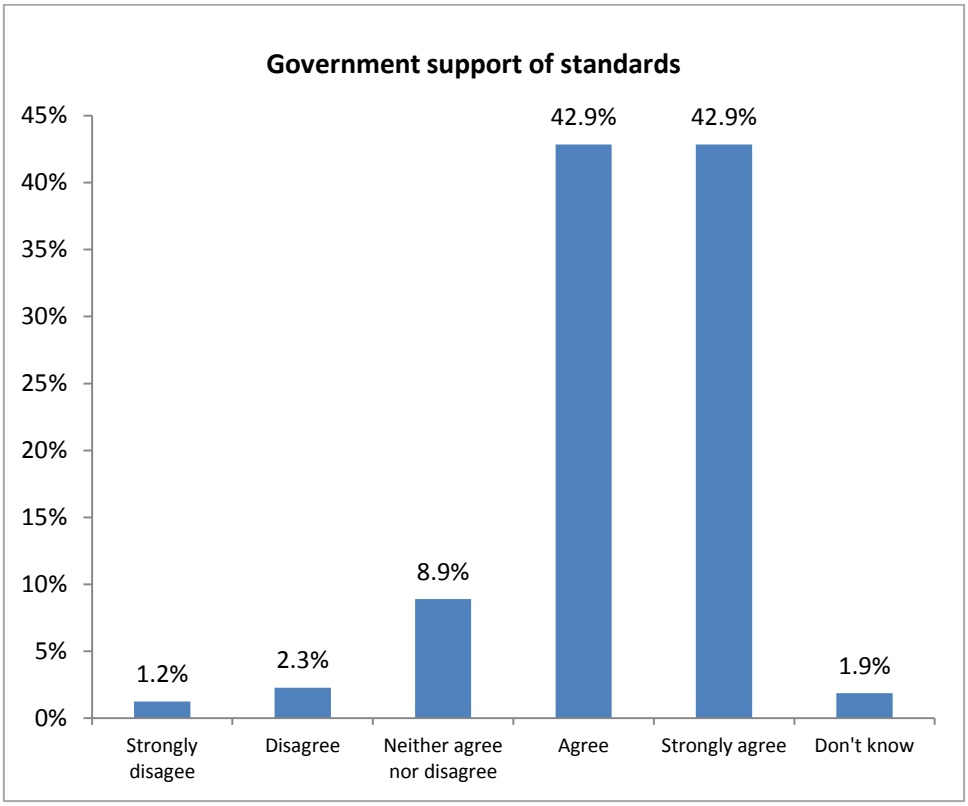
Role of terminology / language standards to success of PCEHR		
	Response Percent	**Response Count**
Strongly disagree	1.4%	7
Disagree	4.3%	21
Neither agree nor disagree	8.1%	39
Agree	**42.6%**	**206**
Strongly agree	39.3%	190
Don't know	4.3%	21
Total responses		**484**



24.2 Government Role in Standards

The government should be involved in and support standard setting and development.

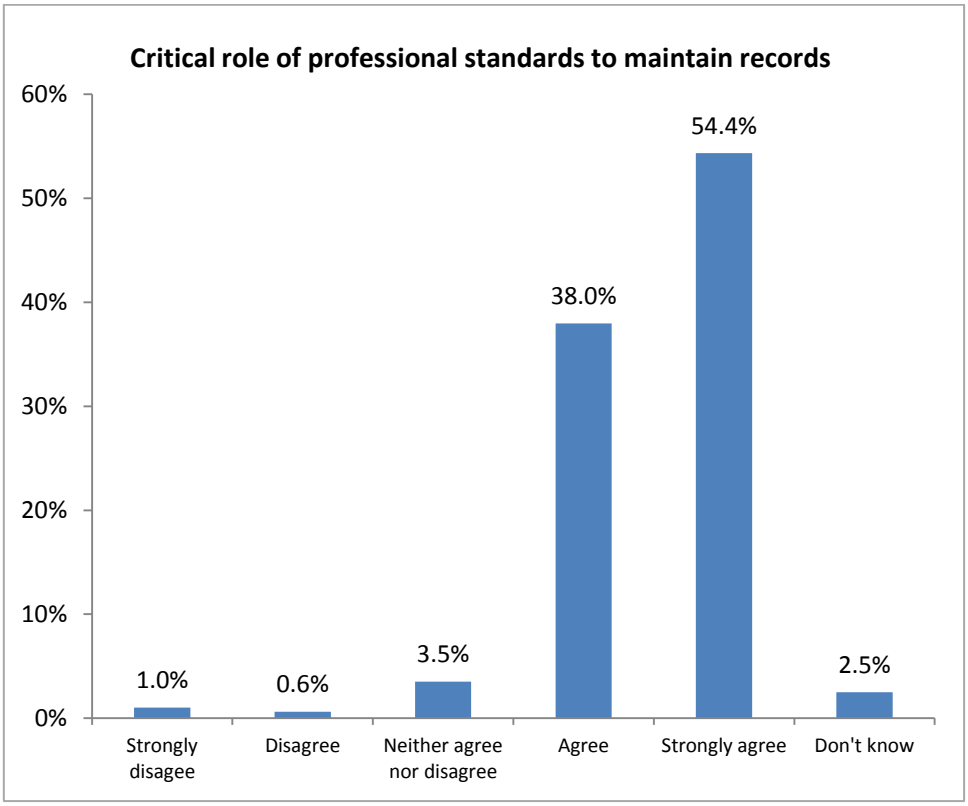
Government support of standards		
	Response Percent	**Response Count**
Strongly disagree	1.2%	6
Disagree	2.3%	11
Neither agree nor disagree	8.9%	43
Agree	**42.9%**	**207**
Strongly agree	**42.9%**	**207**
Don't know	1.9%	9
Total responses		**483**



24.3 Professional Standards

There is a critical role for professional standards in maintaining effective records

Critical role of professional standards to maintain records		
	Response Percent	**Response Count**
Strongly disagree	1.0%	5
Disagree	0.6%	3
Neither agree nor disagree	3.5%	17
Agree	38.0%	183
Strongly agree	**54.4%**	**262**
Don't know	2.5%	12
Total responses		**482**



24.4 Comments - Standards

62 comments are available for further analysis.

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