

**Australian Government****Australian Digital Health Agency**

Request for Information on the Future of the National Infrastructure Part D – Response Form

26 September 2019 FINAL

RFI Number: DH2298

Contact Officer: NIM Contact Officer

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Acknowledgements

Council of Australian Governments

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Part D: Response Form

1. Response Form

- 1.1 Participants submitting a Response to the RFI are asked to comply with the instructions and requirements specified in this document. Please also ensure the Response is written using the guided format shown below.

2. Response Form Instructions

- 2.1 Responses should be substantially in the form of this Part D.
- 2.2 Additional supporting documentation may also be provided with Responses.
- 2.3 Respondents should use the file naming conventions set out in clause **Error! Reference source not found.** of Part B of the RFI and note that the Agency's preferred naming convention for supplementary information is:
- (a) ParticipantName.Supplement 1 [INSERT name of supplement 1],
 - (b) ParticipantName.Supplement 2 [INSERT name of supplement 2]
 - (c) Please also include a bulleted list of all the supplementary documentation in the space provided on page 10 of this form.
- 2.4 Questions relating to this form or the RFI should be directed to the Contact Officer listed in Part B of this RFI.

3. Response page limit

- 3.1 Please limit your Response to no more than 30 pages, including any attachments or supplementary material provided.

4. Participant Details

Please complete the following table.

Table: Participant Contact	Response Details
Name	Royal Australian College of General practitioners (RACGP) Ms Phillipa Walter
Title	Project Coordinator - RACGP Practice Technology and Management
Address	100 Wellington Pde, East Melbourne, Victoria, 3002
Phone	03 8699 0305
Email	pip.walter@racgp.org.au
Area of interest	eHealth
Product or service proposed in this Response	The RACGP would not provide a specific technology and has focused on the overarching principles that should underpin products and services for digital technologies across the healthcare sector.
Technology areas covered in this Response	The RACGP is providing this response as a broad overview of the technology requirements for general practice and the healthcare system more broadly.
Case studies/Reference site	www.racgp.org.au

5. Your Comments

1: Please describe what you see are the design considerations for future updates and improvements of the national infrastructure that supports the digital health products and services delivered by the Agency. Please include how you consider catering for future expansion, scalability and emerging technology areas.

The RACGP envisions the future national infrastructure will support the realisation of the RACGP's [*Vision for general practice and a sustainable healthcare system*](#) (the Vision).

The Vision demonstrates how a well-supported general practice team can deliver sustainable, equitable, high-value healthcare, benefiting patients, providers and funders. It is centred on evidence- and experience-based recommendations regarding how the entire system can be improved.

It is widely recognised that general practice is the most efficient part of the healthcare system. The Vision therefore sees that a well-resourced general practice sector is essential to addressing the existing and future challenges facing patients, funders and providers.

The Vision is underpinned by six core features of high-performing general practice:

- Patient centred
- Continuous
- Comprehensive
- Coordinated
- High quality
- Accessible

The RACGP envisions the national infrastructure will deliver the following:

Patient centred:

The future national infrastructure will empower patients to be involved in decisions regarding their healthcare and must facilitate the ongoing relationship between a patient and their GP.

Patients will have access to their health information through technologies that are interoperable, accessible, intuitive and secure. The national infrastructure must support the improvement of health literacy in the Australian community and will provide patients with their health information in languages and formats that are easy to understand and interpret.

Seamless communication between patients and their GP (and others involved in their healthcare) will improve consumer engagement by placing the patient at the centre of their healthcare experience.

Technologies will support clinicians to provide nuanced care to each patient by providing clinical support and decision making tools, utilising patient data collected once and used across the healthcare sector (where it is deemed appropriate for a provider to have access). For example, technologies will prompt the capture of a patients Aboriginal and Torres Strait Islander status, after which decision support technologies would access MBS data to prompt GPs to conduct a Medicare Item No.715 health assessment.

Continuous:

The future national infrastructure will facilitate the continuity of care for patients within their preferred practice via a voluntary enrolment system, from where their care is coordinated with hospitals and other health and social services.

The inclusion of patient's usual GPs details on their My Health Record homepage will improve communications between healthcare settings through early identification of the appropriate communications destination. Using standardised import and export abilities, diagnosis, medicines, immunisations, and investigations will be able to be directly imported from My Health Record into the appropriate fields within a GP clinical information system.

The national infrastructure will support the single entry of data to be utilised over multiple platforms and by multiple healthcare providers to reduce inefficiencies in data collection and reduce transcription and relay error.

Standardised communication tools will allow transfer of records from one previous GP to another, new nominated GP, with importation into the receiving record system in the appropriate field/sections and denoting previous GP information.

Comprehensive:

Comprehensive care in the general practice context usually takes the form of a multidisciplinary team of care providers who are accountable for the primary healthcare requirements of the patient. The future national infrastructure will allow all members of the multidisciplinary team to partake in a coordinated approach to care provision through improved visibility and communication.

Technologies will allow clinician access to information through seamless integration of evidence based and authoritative decision support tools and prompts within clinical software. The clinical software will be accessible from any point of care.

Coordinated:

Coordinated care involves effective communication and a smooth patient journey through the various levels and settings within the healthcare system, including general practice, hospitals, other specialists, disability services and the social sector. Australians see their GP more than any other health professional, with nine out of 10 people seeing their GP at least once a year (i,ii). Therefore general practice is well positioned to facilitate this coordination.

GPs are highly trained generalist medical specialists working at the interface between the patient and the broader healthcare system. The national infrastructure will assist the coordination of care by GPs, via system interoperability, secure electronic communications (between clinicians, and between clinicians and consumers), improved data quality of health records and integration and standardisation of referral forms within clinical software.

High quality:

The future national infrastructure will support data quality by mandating the use of consistent clinical terminology and minimum standards for clinical information systems. Data will be

standardised, atomic, able to be curated, entered once and used over multiple platforms by multiple providers. Data entry will be automated as much as possible.

Improved data quality will drive research across the healthcare sector and support quality improvement activities leading to safer systems and improved quality of care.

Artificial intelligence (AI) may play a role as a decision making and support tool to assist in evidenced based practice. Application of AI must be supported by a legislated governance and ethics framework.

Accessible:

A report that ranks the Australian system as one of the world's best also identifies it as one of the worst in terms of health equity (iii). Equity, as defined by the World Health Organization is "the absence of avoidable, unfair or remedial differences amongst groups of people, whether those groups are defined socially, economically, demographically or by means of stratification".

The future national infrastructure will play a significant role in improving health equity. This should take the form of simple consumer facing systems, accessible via mobile phones, tablets and computer. Improving network access, implementing consumer health tools which provide access to their health information, improving digital literacy, and providing support for those with impairments that reduce access to technology, would all reduce inequity.

Technologies used in healthcare need to transcend boundaries of language, location and behaviour. Australia has a multicultural population and many patients seeking healthcare from different cultural and linguistic backgrounds may not be able to get optimal care via digital health. Technologies must support culturally and linguistically diverse populations to access to their personal health information in an interpretable fashion.

Technologies should aim to improve access for all populations to receive high quality and timely healthcare from their regular GP through non-face-to-face consultations such as telehealth that are seamless for end users. When patients are unable to physically attend their practice, they will be able to appropriately communicate with their GP utilising technologies in a safe and secure manner.

Systems must support authorised carers to access and manage healthcare information on behalf of those they care for.

Digital support for these six core features of high-performing general practice will support the quadruple aim of primary healthcare, identified as:

- Improve patient experience
- Reduce healthcare costs
- Improve the health of the population
- Improve provider experience (iv)

Education and training is vital in meeting the quadruple aim of healthcare and executing the Vision. The future national infrastructure MUST be supported by a strong change and adoption strategy, fostering engaged leadership to drive a national digital health agenda.

References:

- i. Australian Bureau of Statistics. Patient experiences in Australia: Summary of findings, 2017–18. Cat. no. 4839.0. Canberra: ABS, 2018. 10.
- ii. Australian Institute of Health and Welfare. Australia's health 2018. Cat. no. AUS 221. Health and welfare expenditure series no. 64. Cat. no. HWE 74. Canberra: AIHW, 2018.
- iii. The Commonwealth Fund. Mirror, mirror 2017: International comparison reflects flaws and opportunities for better U.S. health care. New York: The Commonwealth Fund, 2017. Available at [www. commonwealthfund.org/publications/fund-reports/2017/ jul/mirror-mirror-2017-international-comparison-reflectsflaws-and](http://www.commonwealthfund.org/publications/fund-reports/2017/jul/mirror-mirror-2017-international-comparison-reflectsflaws-and) [Accessed 21 November 2019]
- iv. Bodenheimer T, Sinsky C. From triple to quadruple aim: Care of the patient requires care of the provider. *Ann Fam Med* 2014;12(6):573–76.

2: Please outline the technology focus areas (including new or emerging technologies) that should be considered to keep pace with the latest developments (including standards).

All technologies part of the national infrastructure must be seamless, integrated, accessible and secure.

All technologies must be simple, quick, and easy to use and be relevant to the needs of the intended user. This must be the case for both clinician and consumer facing technologies.

Technologies must support the seamless integration of health data from local records into shared records and vice-versa. For example, information could automatically flow from general practice clinical information systems in to My Health Record in a similar manner that MBS and PBS data currently does.

Documents should be coded using atomic data and be able to import directly into appropriate parts of general practice software. For example information from discharge summaries, such as new diagnoses or procedures, should be able to be imported directly into local clinical information systems rather than having to be manually transcribed across.

All technologies must integrate with, or improve, current workflows. Systems must be integrated across the healthcare sector, which may require a consolidation of systems.

Poor internet access for remote health providers impacts on the ability to use digital support tools and information systems, with slow systems hampering efforts to document discussions with patients. Similarly, patient access to their own health data and health information is effected by poor internet access. The national infrastructure must be supported by improved national access to reliable internet and download and offline local storage for when connection to the national infrastructure is not possible.

The change of My Health Record from an opt-in to an opt-out system, and the subsequent data security concerns, highlights the need for any infrastructure to have robust security provisions. Building trust in the system will be critical to the success of national infrastructure implementation and adoption.

The national infrastructure must ensure that only persons requiring certain health information have access to that information. The national infrastructure should be supported by a single health provider authentication mechanism that must be used across all jurisdictions. This may be an expansion of the current NASH certificate program. There should be a reduction in the other identifiers currently used for different purposes i.e. Provider Numbers, Prescriber numbers, AHPRA numbers, Health Provider and Patient identifiers.

The RACGP recognises the value of data sharing to better inform policy, population health and research and in principle supports de-identified data sharing to deliver benefit to Australians. The national infrastructure must have the capacity to collect, analyse and share de-identified health data (with appropriate parties) for these purposes, supported by strong data governance legislation.

3: Please outline your view of priorities for the future of the Agency's digital products and systems (including technologies) and how you consider the Agency could drive efficiencies in the total cost of ownership):

Resoundingly, RACGP members identify system interoperability as the top priority for the future national infrastructure. See the RACGP response to the Australian Digital Health Agency: National Health Interoperability Roadmap – Communities of interest consultation [Supplement 6].

Interoperability will support:

- Clinician and consumer engagement
- Exchange of patient health information across the health sector
- Efficient and accurate clinical handover and referral
- The national shared health record (current My Health Record)

Whilst general practice has been an early adopter of electronic systems including secure electronic communication, the system remains inefficient whilst we have no one to talk to. A national priority now exists for the entire healthcare sector to adopt interoperable technologies.

For interoperability to be realised, the national infrastructure must:

- utilise standardised terminology, nationally recognised coding systems and medical vocabulary which is mandated for use by all Australian healthcare providers
- utilise standardised and accessible technology
- utilise atomic data
- adopt consistent use of identifiers (i.e. NASH) - Healthcare Identifiers must also be mandated to be used in communication between health providers
- include communication channels between clinicians and consumers
- be publically accessible so it can be modified and shared easily across the healthcare system.

There are pockets of innovation in the Australian digital health landscape and the national infrastructure should leverage off and expand on existing local products, to deliver a national product. For example, real-time prescription monitoring software should be a national product rather than introduction of state based and non-interoperable software.

4: What capabilities do you think might be required for the future success of the national infrastructure?

Change and adoption:

Barriers to the uptake of technology in healthcare have traditionally been around a mistrust of technology, lack of clinician interest in technology and a lack of belief that technology can improve the management of health information or lead to better health outcomes. For small general practices significant barriers have been the high cost of investment in expensive technologies, systems and support, and of education and training for practice staff in using technology.

The national infrastructure must be supported via a robust, funded, change and adoption strategy that fosters the idea of trust in data to enable data to be entered once and used across multiple settings in healthcare. This will foster continuity throughout a patient's healthcare journey.

Solutions must consider and align with both existing practice and clinical workflows to ensure they are acceptable to providers, clinically meaningful, provide benefit and are clinically safe.

Alternatively, they must provide improvement in practice and workflow, significant enough to warrant abandonment of previous practice. For example, computerised systems are so exponentially better than paper based systems, that we have abandoned paper. This has been done willingly over time by clinicians, because they found this to be better, not because they were told by an authority to make the change. Were this to occur, changes must be similarly led and supported by clinicians.

Clinicians across the healthcare sector must be supported in their use of technology via initial, ongoing and mandatory education. For smaller practices and independent practitioners, incentive payments may remove financial barriers that currently prevent some practices from implementing or updating technologies.

Strategies must include the strengthening of consumer digital health literacy. Currently the majority of clinical reports accessible to consumers contain terminology aimed at healthcare providers and patients may try to interpret information they may not fully understand. Technology needs to consider the clinical, social, emotional and cultural aspects of care.

Engagement:

Seamless, integrated, accessible and secure systems will only become a reality with in depth consultation and engagement with all relevant clinicians (with consumer input), and in an ongoing and meaningful manner. Education should be legislated and engagement may be improved via incentivisation.

Mandating:

The RACGP believes there is the opportunity for improvement through mandating certain clinician led standards or requirements to drive quality and safety. The mandated use of standardised terminology, nationally recognised coding systems and medical vocabulary, and the implementation of recommendations outlined in the [RACGP report: Minimum requirements for general practice clinical information systems to improve usability](#) could support the development of standards for all digital health systems, creating a strong foundation for interoperability.

Changes to harmonise state legislation will ensure system requirements can be determined and implemented at a national level.

5: What factors do you think should be considered for inclusion in the future development of the national infrastructure?

Minimum requirements for clinical information systems

The RACGP [*Minimum requirements for general practice clinical information systems \(CIS\) to improve usability report*](#) identifies and details a number of key CIS functions and roles, and provides recommendations focused on improving usability in the collection, management, use and sharing of information. The minimum requirements provide the foundations for interoperability and could be applied across the entire healthcare system. The development of this process must be clinician led, for clinicians in their relevant fields.

Reliable internet

A large percentage of Australia's population live outside major metropolitan areas and technology to improve access to care for those in rural and remote areas is essential to support:

- non face-to-face consultations
- electronic transfer of information
- access to information and health directories.

All of these technologies require access to high speed and reliable internet connections and currently, internet access is not distributed equally across Australia.

Reliable internet will facilitate the key functions of digital health including online consultations, remote patient monitoring, online tools and resources for patients and doctors, clinical communications between healthcare providers, and access to electronic health records.

Technologies that support the clinician-patient relationship

Technologies should support the clinician-patient relationship. They should be able to use data to provide a real time holistic view of a patient that is accurate and increases the ability of the clinician to manage healthcare issues. These technologies include:

- telehealth software integration into practice software that allow real time distant consultations
- the inclusion of dictation (voice recognition) software in clinical information systems which may support clinicians interaction with patients, making computers less intrusive in consultations
- These technologies may also facilitate natural language processing for the collection of high-quality data. Additionally, direct entry of clinical measurements into software would facilitate better data capture and reduce burden and error risk (e.g. BP machine, scales, thermometer, pulse oximeter, ECG, spirometry, clinical photographs)
- effective handover of patient clinical records when patients transfer to another practice via online data exchange
- remote monitoring through wearable devices which can monitor a range of vital signs including, heart rate, blood pressure and blood sugar levels with information being sent directly to clinical information systems.

Digital technologies should build trust between patients and clinicians and should support a positive experience for both parties, that is user friendly and makes patients feel they are receiving the same levels of care that they would in a physical consultation.

Digital tools need to be adopted with a well-thought-out strategy to ensure these healthcare solutions work at their best.

Technologies that support the enrolment of patients to a practice

Voluntary patient enrolment will help GPs and patients forge strong relationships, which in turn means better health outcomes for the patients. Technology to support patient enrolment would include the ability to flag patients enrolled with specific general practices, support the co-ordination of treatment through secure electronic communications and improve preventive health activities with more appropriately targeted patient recalls and reminders.

Integration and validation of patient derived data

There are potential benefits in terms of both care delivery and business efficiency through the use of mobile tools such as smartphones, tablets and other medical devices (e.g. wireless monitors).

Advances in mobile devices and applications (apps), improving internet connections, and the ability to integrate new technology with existing services and structures have led to greater acceptance and uptake of mobile tools by healthcare providers and consumers. The [*RACGP Views and attitudes towards technological innovation in general practice – Survey report 2018*](#), indicates 70% of GP respondents recommend apps to their patients on a daily or weekly basis – up from 40% in 2017. However, lack of integration into clinical software and workflows is identified as a significant barrier to recommending apps to patients. There is also a lack of knowledge about the validity and accuracy of the various apps and tools available.

Home monitoring devices should utilise codified atomic data to support point-to-point transfer of information, integrating information into local healthcare systems that are able to be curated and shared across multiple platforms. Strong governance needs to be in place to ensure delegation of responsibility for real time monitoring of results/data produced via such devices.

Change and adoption strategy

Technology itself is only one part of the future national infrastructure. Supporting the infrastructure must be a robust, and nuanced, change and adoption strategy for both healthcare providers and consumers.

This could include:

- a trained workforce through inclusion of eHealth in curriculums across the health sector, and through the career span
- support for peak body engagement, consultation and education delivery
- financial incentives' supporting adoption
- consumer engagement and education.

6: Please provide a summary of your organisations relevant capability and experience.

(Maximum one page)

The RACGP's mission is to improve the health and wellbeing of all people in Australia by supporting general practitioners, general practice registrars and medical students. The RACGP is Australia's largest professional general practice organisation, representing more than 40,000 members who treat almost 22 million patients across Australia every year.

As the independent member-based organisation for general practice, the RACGP is the national leader in setting and maintaining standards for practice and education.

The RACGP has a strong history of advising governments and other stakeholders on what is reasonable, workable and useful for general practice. This includes promoting the potential of eHealth to deliver substantially greater quality, safety and efficiency benefits. In 2018, the RACGP collaborated with the Australian Digital Health Agency and general practice software developers to determine the feasibility of developing an agreed set of minimum requirements for general practice software. After three industry workshops, recommendations for minimum requirements were published [Supplement 2].

The RACGP has long held an interest in this area, first publishing IT policies in the 1970s and *Standards for Computerised Medical Record Systems* in the 1980s. The RACGP continues to provide information and advice on eHealth developments, information and record management, and issues affecting the future operation of Australian general practice. The RACGP continues to advocate for improvements to the Australian digital health landscape through ongoing engagement, consultations and submissions.

The current RACGP Expert Committee – Practice Technology and Management (REC–PTM) (formerly RACGP Expert Committee – eHealth and Practice Systems) oversees and supports a program of work which includes:

- developing business tools and resources to support general practice's use of eHealth technologies
- advising the RACGP on the development and promotion of eHealth standards in general practice
- developing RACGP position statements on key external eHealth initiatives
- hosting educational programs and events, including the annual RACGP eHealth Forum, which brings together leaders in eHealth (including representatives from government, software vendors, PHNs and clinical practice) to share ideas on the future of digital healthcare
- Representing the RACGP in various advocacy roles with multiple organisations in the Australian Healthcare system.

The REC–PTM produces a range of resources covering topics relevant to general practice management and the use of eHealth technologies. Such as:

- [*Information security in general practice*](#) – details and recommends essential business practice, policies and procedures to help protect general practice information systems. It is not designed to be a technical document, but rather an educational and training resource for GPs and practice teams.
- [*Guide to information backup in general practice*](#) - provides recommendations, practical advice and checklists to help general practices achieve secure and reliable information backup and data recovery processes.

- [*mHealth in general practice*](#) – a toolkit for effective and secure use of mobile technology – provides general practices with a framework to introduce and promote the safe and effective use of mobile devices and mobile technology in general practice. It offers step-by-step guidelines to ensure general practices build an mHealth culture and understand how mobile technologies may affect practice policies.
- [Improving health record quality in general practice](#) - outlines what constitutes a high-quality health record and provides recommendations on how practices can put systems in place to ensure they produce health records that are fit for purpose.

Other: Please provide any other information and/or comments you would like to make about the national infrastructure, or the future evolution of the national infrastructure.

Technology will play an essential role in the realisation of the [Vision for general practice and a sustainable healthcare system](#). But technology is only one part of the answer. Change and adoption programs will be critical to the success of any infrastructure changes and sufficient resources and funding must be allocated to this. Programs should support both healthcare provider and healthcare consumer adoption.

In order for the Vision to be realised, positive engagement with general practice, and with clinicians across the health sector must be maintained. The RACGP has a solid history of being at the forefront of innovation in the health sector and has guided government and key stakeholders in initiatives that support quality general practice in Australia.

The use of technologies to deliver healthcare should be seen as an enabler to support the delivery of better patient outcomes. Digital technology does hold great promise but is not a solution on its own. Digital innovations must provide benefit and complement models of care that are proven to provide improved patient outcomes.

The RACGP is hopeful that it can look forward to working collaboratively with the Australian Digital Health Agency and other stakeholders regarding the future national infrastructure to support safe, quality healthcare to all Australians.

Supplementary documents: Please list any supporting documentation here using the Agency's preferred naming convention provided in section 2 of this Response Form. For example:
ParticipantName.Supplement 1 Report on medical record keeping technologies.

Please observe the requested page limit provided in section 3 of this Response Form.

Supplementary documents:

- RACGP.Supplement 1 - [RACGP Vision for general practice and a sustainable healthcare system](#)
- RACGP.Supplement 2 - [RACGP report: Minimum requirements for general practice clinical information systems to improve usability](#)
- RACGP.Supplement 3 - [RACGP position statement: The use of secure communications within the healthcare system](#)
- RACGP.Supplement 4 - [RACGP position statement: My Health Record](#)
- RACGP.Supplement 5 - [RACGP Views and attitudes towards technological innovation in general practice – Survey report 2018](#)
- RACGP.Supplement 6 - RACGP submission: 'Australian Digital Health Agency - National Health Interoperability Roadmap – Communities of interest' consultation