

# National Digital Health Strategy Submission

January 2017



**Asthma  
Australia**

Health Policy and Positions

Asthma Australia is peak body supporting people with asthma and their carers in Australia. We and our member Asthma Foundations, welcome the opportunity to provide comment and insight on how digital health can help support Australian's but more specifically people with asthma and their carers. The future of digital health can support the effective management of asthma, enable consumers to take control of their health and ultimately improve both asthma and general health outcomes.

## A National perspective

For over 50 years Asthma Australia and Asthma Foundations have been the leaders in asthma health care, research and support. Asthma Australia delivers evidence-based preventative health strategies to over 200,000 people every year and provides support, training and resources to the primary health care sector. We fund vital basic science and population health research contributing to national and international understandings of asthma and how best to manage the disease.

Asthma remains a significant cause of ill health, disability and poor quality of life in Australia. It is estimated 2.5 million Australians have asthma, and poor control of this widespread chronic condition is common. The prevalence of asthma is high by international standards with 1 in 9 Australians (11%) suffering from asthma nationally, (ABS, 2015). In 2014, there were 419 deaths due to asthma (ABS, 2014). Asthma is associated with a poorer quality of life and represented by people with asthma reporting worse psychological health than those without asthma, including increased anxiety and depression.

The biggest gap between evidence and practice lies in asthma diagnosis and management. Despite guideline recommendations, too many people with asthma have suboptimal asthma control. Digital health in Australia can and will play a role in closing this gap by supporting people with information and tools to improve asthma control, quality of life, thereby reducing asthma morbidity and its associated costs.

## The role of digital technologies in health

The way in which consumers both the public consumer (individual) and healthcare professionals interact with the healthcare system needs to be considered in the development and successful implementation of the digital health strategies and innovations. Digital health should drive new and disruptive health models in an effort to improve access, patient outcomes and patient satisfaction with the healthcare system itself whilst enhancing and supporting the roles and responsibilities of healthcare professionals.

People with chronic disease require evidence based, user friendly information to help them better understand and manage their disease. Digital mediums can support the distribution of this information to a significant number of people, in dynamic formats, which are accessible any time of day from anywhere in the country i.e. digital diagnostic and assessment tools, management plans, referrals pathways, and medication adherence and alert systems.

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There are several critical issues to consider for consumers in the digital health space. Firstly, the varying levels of health literacy of consumers must be considered to ensure data and information is meaningful to them. Additionally, the provision and availability of adequate technology e.g. internet access. With consideration to these elements consumers will have better access and reach into target populations, such as rural and remote communities will be more realistic and achievable.

Effective digital technologies should improve and complement the status quo of healthcare – solve a problem, continue to strive for a more accessible, effective and efficient healthcare system for all Australian's. They should allow personalised systems to prompt positive health behaviours and elicit the adoption of preventative health measures and self-management practices whilst providing user's feedback based on their demographics health risk and identified disease and illnesses.

Identification of what constitutes good user experience for people managing their long-term conditions to ensure ongoing use of technology will promote and provide opportunities for positive engagement and more importantly re-engagement with the healthcare system over time and throughout the life-cycle. The value of continued engagement and feedback should not be underestimated and should be considered in the evaluation of all digital health strategies.

The development and implementation of digital technologies in health require significant levels collaboration and investment with consumers, technology and clinical health experts, key stakeholders and advisory groups. Collaboration between peak health advisory and consumer bodies should be engaged with the ability to:

- provide evidence based credible information, services and support
- endorse evidence based digital mediums providing information and resources
- act as a conduit between the Digital Health Agency and their consumer base
- support and endorsement of national digital health initiatives to their stakeholders.

Digital health technologies can support integration of various players in the healthcare system and elicit better outcomes and measures, sharing of health information and access between consumers and providers, e.g. primary, secondary and tertiary care. Linking to and investing in the development of existing digital platforms should be taken advantage of and utilised to create pathways for interoperability. However it occurs, it must do so with safety and efficiency and with the trust of consumers established.

The use of digital health technologies should be considered within the broader health policy context, for example providing opportunities to assist in the monitoring and reporting of measures and outcomes within the National Strategic Framework for Chronic Conditions and associated health strategies (e.g. National Asthma Strategy).

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## Priority Initiatives for My Health record

The healthcare system is a complex environment with varying levels of interaction and progression of digital technology within it. There are two consumer groups to be considered in the successful implementation of digital health activities, the individual and healthcare professionals. The intricacies of the digital technologies within the healthcare system and consumer readiness and acceptance was made evident with the introduction of eHealth in Australia (PCEHR). There were limitations and barriers to the adoption for both individuals and healthcare professionals. Perhaps the development of digital technologies are themselves at times premature to the development of robust methodologies to validate their impact, effectiveness and mechanism of action.

The re-invigoration of My Health Record provides the opportunity to reenlist consumer confidence in digital health utilising a multidisciplinary approach. Areas of priority should include:

- Inclusion of disease or illness specific evidence based self-management elements and guideline recommendations that are known to improve health outcomes or assist in the management of a disease. This can be done through partnerships with clinical experts and leveraging of or investing in further development of already existing technologies (e.g. mobile apps and software) to collect information and create pathways between these applications and the My Health Record. The Digital Health Agency and My Health Record would provide the expertise in linkage and data sharing capability whilst external bodies provide the platform and expertise.
- Access for support organisations (e.g. those providing self-management education and support) to MyHealth Record (consent provided by consumers to access).
- Employ strategies to enhance the uptake and continued engagement of healthcare professionals that subsequently leads to patient uptake and reengagement. Identify the high value motivations and drivers for use.
- Consider prioritising development initiatives within the My Health Record for priority and/or at risk populations (e.g. people with chronic diseases) and prioritise initial uptake for people with chronic disease/comorbidities. Ensure digital Chronic Disease Management Plans/Care Plans are incorporated within My Health Record to allow seamless sharing between clinicians and patients.
- Identification of what data is required within the health record platform specific to chronic disease and illness, inclusive of preventative health measures and risk assessment tools, e.g. diagnostic test results, chronic disease management plans and symptom monitoring.
- Interoperability between My Health Record and Chronic Disease Management software utilised by support organisations.

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## Opportunities for digital health in asthma care and management

While there is currently no cure for asthma, there are effective management strategies available to control the disease and prevent the worsening of asthma symptoms. Evidence-based effective strategies are available to address patient factors such as medication adherence, correct inhaler technique, use of asthma action plans and understanding asthma triggers. Similarly, health professionals need to work in partnership with patients to conduct regular reviews, prescribe appropriate medications, update asthma action plans, and assist patients to use their inhalers correctly. (National Asthma Council Australia, 2016). Innovation in digital health technology and more integrated healthcare systems are likely to transform asthma care and ease pressure on the healthcare system by reducing avoidable GP appointments and enabling people to manage their own condition. (WHO, 2013).

Asthma management can be enabled and advanced through future investment in digital innovation, interoperability and data linkage between existing or next generation technologies. The introduction of digital technologies will:

- Enable more informed and effective healthcare professional led management.
- Motivate and support patient asthma self-management behaviours
- Provide opportunities for evidence based asthma education opportunities
- Facilitate shared decision making between patients and their chosen healthcare professional.

Opportunities exist at a patient and healthcare professional level, including:

### Risk stratification and identification

Technology and data-sharing should allow routine identification of a high risk patient irrelevant of which area of the healthcare system they are interacting with.

Identification of most at risk asthma patients for appropriate referral pathways to both intensive healthcare professional intervention and ongoing self-management coaching and support services e.g. Asthma Australia COACH Program which provides people quality assured, evidence based ongoing support that looks at lifestyle, risk factors and in conjunction with a GP, works to reduce the treatment gap between clinical guidelines and a person's reality.

### Prescribing and medication adherence/usage

Linking digital health IT between Pharmacy and General Practice to promote safer prescribing and highlight over-use of short-acting reliever medications and/or under-use of inhaled corticosteroids.

Utilising mobile technologies for electronic surveillance of medication adherence (or usage) and delivery device technique of prescribed and over-the-counter medications, linked to My Health record and/or appropriate digital health IT (e.g. smart inhalers that are linked to Bluetooth enabled mobile devices to track when asthma medications are taken, and subsequent reminders/alerts when doses have been missed).

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## Alert systems

Notification in primary care of every emergency department presentation, hospital admission or out-of-hours-care for asthma, providing opportunity for follow-up and real time data on patients.

Notification to healthcare services of potential high risk events that are likely to result in increased presentations or call-outs for asthma. Notification will allow time to prepare and provide adequate resourcing.

## Integration of systems to support self-management

Digital health technologies are increasingly becoming mainstream tools to assist patients in self-management, particularly digital Asthma Action Plans, which could link to a person's My Health Record, making them more readily available and accessible, and increasing utilization of such tools. In addition, real-time symptom and asthma control monitoring, environmental/trigger alerts (e.g. pollen, pollution, smoke, and air changes), recognition of worsening asthma and appropriate emergency response are possible.

## Improvement in the quality and access of health records

Inclusion of measures relating to National Asthma Indicators and the assessment and collection of related comorbidities and risk factors (e.g. weight, height, anxiety, depression, smoking status etc). Access and use of health records (upon consent) among all relevant healthcare and support providers (General Practice, hospital, specialist, pharmacy, allied health and health coaches).

## Personalised computer decision support

Asthma guidelines embedded within decision support software to support clinician-led asthma care. Use of decision support software enables the scope of practice nurses to be expanded, ensuring additional resourcing to execute strategies recommended by clinical guidelines, and offering patients greater options for education in a primary care setting. For example national implementation of GASP – decision support software based on clinical management guidelines for asthma, enabling trained practice nurses to run asthma clinics and support GPs in comprehensive diagnosis, treatment and education around asthma.

## Asthma Australia's digital health priorities

As the peak body for people with asthma and their carers, Asthma Australia will continue to commission, fund and communicate research, expand telehealth (The COACH Program) and decision support software, conduct consumer advocacy and provide information and resources via digital mediums with a priority of continuous innovation and development of digital platforms to align with the broader digital health landscape. We place an importance on developing and partnering on digital health initiatives and campaigns.

Asthma Australia and its member Foundations acknowledge and commend the Australian Digital Health Agency for their efforts thus far in working with the community to co-produce a National Digital Health Strategy and welcome any further opportunity to contribute and to be actively involved, providing our expertise and services to ensure Australian's and in particular Australian's with asthma are represented in the evolving digital health landscape.

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## References

ABS. (2014). *Causes of Death Data: Customised Report*. Canberra: ABS.

ABS. (2015). *National Health Survey: First results 2014–15*. Canberra: ABS cat. no. 4364.0.55.001.

National Asthma Council Australia. (2016). *Australian Asthma Handbook, Version 1.2*. Retrieved from National Asthma Council Australia, Melbourne: <http://www.astmahandbook.org.au>

WHO. (2013). *Mental health action plan 2013–2020*. Geneva: World Health Organisation.