

Australian Government

Australian Digital Health Agency

Utilising My Health Record to enhance medicines safety in chronic disease patients

Kate Ellis and Laila Tabassum 28th August 2019



Acknowledgement



We would like to acknowledge the traditional owners of country throughout Australia, and their continuing connection to land, sea and community. We pay our respects to them and their cultures, and to Elders both past and present.



Australian Government

Australian Digital Health Agency



Australian Government

Australian Digital Health Agency

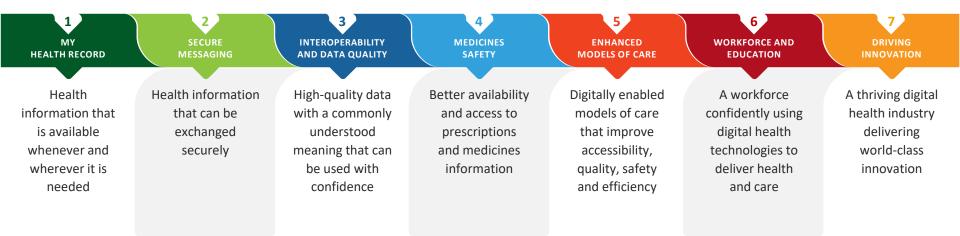


My Health Record



National Digital Health Strategy – roadmap for delivery

Co-designed with all states and territories and agreed by COAG Health Council







Poll question 1 What is your primary place of work?

General Practice
Specialist Practice
Allied Healthcare Provider
Community Pharmacy
Hospital
Aged Care Provider
Digital Health Support staff (e.g. Primary Health Network)
Other

Australian Digital Health Agency



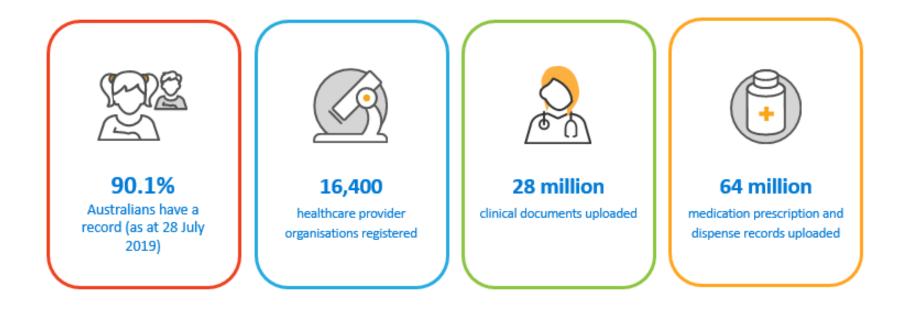
Poll question 2

Do you utilise My Health Record in your healthcare practice/workplace?

- A Yes, already embedded into our practice/workplace
- B Yes, just starting with it
- C No, but plan on registering in the future
- D No, do not plan on registering for My Health Record
- E Not applicable (e.g. do not work for a healthcare provider organisation)



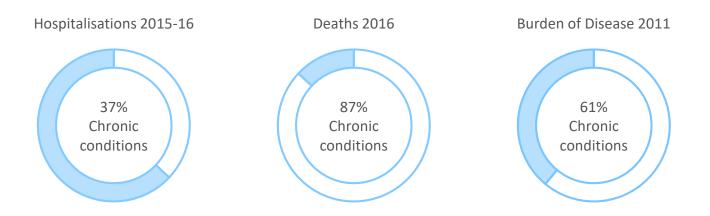
My Health Record – latest national statistics





Chronic disease burden and medication misadventures

Medicine-related problems are most likely to occur during periods of change, such as moving between care settings (e.g. hospital and the home), when a new health diagnosis is made (e.g. diabetes) or during a major health event (e.g. stroke, heart attack).¹





<u>https://www.psa.org.au/advocacy/working-for-our-profession/connecting-the-dots-digitally-empowered-pharmacists/</u> <u>https://www.aihw.gov.au/reports/australias-health/australias-health-2018/report-editions</u>

Medicines Information in My Health Record



Australian Government

Australian Digital Health Agency

Medicines Information in My Health Record



Dispense Records (Pharmacies)



Prescribing Records (General Practices, Specialists)



Medicare/PBS Information (Dept Human Services)



Shared Health Summaries (General Practices)



Discharge Summaries (Hospitals)



Specialist Letters and eReferrals



Event Summaries (All Healthcare Providers)



Pharmacist Shared Medicines List (PSML) (Pharmacies)





Personal Health Summary (entered by the patient)

Medicines Information in My Health Record

- Dispense Records (Pharmacies)
- Prescribing Records (General Practices, Specialists)
- Medicare/PBS Information (Dept Human Services)
- Shared Health Summaries (General Practices)
- Discharge Summaries (Hospitals)
- Event Summaries (All Healthcare Providers)
- Personal Health Summary (entered by the patient)
- Specialist Letters and eReferrals
- Pharmacist Shared Medicines List (PSML) (Pharmacies)

Medicines View – Medicines Preview tab

AY ENGINEER Dol	В 25 Sep 1958 (59y) S			Health Record - sorted by Date			
Allergies and Adverse Reactions Animals, NewAllergy, Pollen, Bee Sting, Penicillin, Morphine, Tramadol		Medicines Preview 15-Jul-2016 to 30-May-2 (5 days ago)	018	Shared Health Summary 10-Jun-2017 (12 months ago) Author: Own Own organisation	05-May-2018 (4 we Author: Own <u>Own organisation</u> tel:(07) 9999 8888 fax: 0499 999 999	Own organisation tel:(07) 9999 8888	
Back to top]		[<u>≤] First</u>		(<<) Previous	(Help)		
Medicines Preview - La 15-Jul-2016 to 30-May-20	itest Documents, Dispenses 018 (5 days ago)	, Prescriptions - sorted by	descending event date.				
Source/Author	Date	Medicine - Active Ingredient(s)	Medicine - Brand			Directions	
Patient-entered information	30-May-2018 (5 days ago)		Ventolin			100 metered doses for Asthm	
Discharge Summary by Own organisation	05-May-2018 (4 weeks ago) active		Amlodipine (Norvasc (Amlo	dipine) 10mg)		One tablet daily	
	active		Atenolol (Tenormin S0mg)			One tablet daily	
	active		Clopidogrel and Aspirin (Co	Plavix 75 mg/100 mg)		One tablet daily	
	active		Insulin Aspart Protamine Si	uspension (Novomix 30 Penfill, 3ml 100IU/ml injection)	Twice daily with meals for IDDM	
	active		Irbesartan (Karvea 300mg)			One tablet daily for Angina	
	active		Metformin Hydrochloride (M	letformin 1g tablet)		One tablet twice daily	
	active		Metoprolol Tartrate (Betalo	: 50mg)		One tablet twice daily	
	cancelled		CEASED: Nurofen 400mg (Reason: Reason for Change not stated.)		One or two tablets prn	
	active		Tadalafil (Cialis 10 mg table	it, 4)		As directed	
	active		Varenicline (Champix Table	t img)		One tablet twice daily	
Pharmacist Shared Medic by <u>Own organisation</u>	ines List (3 months ago)			ly Health Record document list to open other earlier sp ow for a preview of medicines information. ce document.	pecialist letters not listed here.		
e-Referral by <u>Own organisation</u>	15-Jun-2017 (12 months ago)	E.		ly Health Record document list to open other earlier e- ow for a preview of medicines information. ce document.	Referrals not listed here.		



Pharmacist Shared Medicines List (PSML)

The PSML may be an important outcome from a medicines reconciliation as well as providing a useful reference source for future medicines reconciliation.

Access to the PSML via My Health Record is important as:

- It may include prescription and non-prescription medicines *as well as* over-the-counter (OTC) medicines and complementary medicines (such as vitamins, herbal medicines)
- Better medicines information via a PSML can reduce medication errors





Where does the information come from when creating a Pharmacist Shared Medicines List (PSML)?

- PSMLs might be created based on:
 - o a hospital discharge medicines list
 - a medicines history provided by the consumer
 - a dose administration aid medicines list
 - a pharmacist professional service
 e.g. a Home Medicines Review
 (HMR
- Only a pharmacist can authorise the upload of a PSML to a consumer's My Health Record





What does a Pharmacist Shared Medicines List look like currently?

Laurel Hale		20 Trenery Street, Melbo	ourne, NSI	1,0007 11016.0.	Hospital/UR Number	N/A	
Date of Birth 4 Aug 1998 (20 years) Address 123 Test, Test Vic 3000	, 11 month	s) Medicare Number 2952 Preferred First Name		1	DVA Number Preferred Last Name	N/A N/A	
Reconciliation Notes	Author	Individual User, Medical Practitioner		Source	Madian Descriptions - Defend the	Date: 25 Jul 2019 11:4	4 AM
			!	Pharmacist, Patient	, Medical Practitioner, Patient List		
Medication		Directions	Medicat	tion Notes			DA
Lipitor Tablets Atorvastatin Tablets 20 mg (blister) 30		Take ONE tablet daily *Avoid eating grapefruit or drinking grapefruit juice while being treated with this medicine					~
Vita-D Gel Caps Colecalciferol Capsules 25 mcg (≡ vit D ₃ 1000 IU) 60		Take ONE capsule daily at night	Suggest	re-testing blood o	oncentration and reviewing dosag	e after 3 months	
Astrix Tablets Aspirin Tablets 100 mg 112		Take ONE to TWO tablets in the morning					
Nexazole Tablets Esomeprazole Tablets 20 mg 30		Take ONE tablet daily when required					•
Caltrate Bone & Muscle Health Tablets Calcium carbonate: Colecalciferol: Magnesium: Copper; Manganese Tablets 60		Take ONE tablet daily					
Pharmacist Signature							
Date//							

Stage 1 – Fred MedView sample PSML

Patient Patient Demo								Ashford Pvt Hospital, 55 Anzac H ASHFORD 50
Gender Male								
Address 123 Fake St Sar	mpletown SA 543	2						
UR 123456								Printed by crawford at 21/06/2019 12:00:23
DOB 10/04/1973								
Allergies								You have been prescribed the following medication This information will help you use it safely and effective
Prepared By crawford at	21/06/2019 12:00:	23 PM	C	Ooctor				
Medication Name	Other Names	Numbr	er to Tak	ke / Dire	ctions	Purpose	Medication Change	Special Instructions
OXYCODONE & NALOXONE (TAB MR) 10MG 5MG	Targin	Morning 1			Bedtime	A combination tablet with two madications one to that fractional madications one to that fractional which can help induce side effects e.g. constipation	NEW medication	Modified release tablets must be swallowed whole with an adequate amount of flat, do not crush, Discuss with your doctor or phramachine there to tag bissource and the state of the state of the tag this medication; gradual reduction may be required don't drive, use machinery or undertake any activities where astheress is required util you have don't drive, use machinery or undertake any activities where an interaction; drive tag don't drive, use machinery or undertake any activities where an interaction; drive tag and taxatives may be needed. Nausse and vomitin any accors making with this medication may cause have a drive the size of the state of the regulatry. Do not drive graphitul juce where on the medication or tabs 3. Juch's Wort .
PANTOPRAZOLE (TAB EC) 20MG	Somac, Sozol, Salpraz, Panto, Ozpan, Gastenz, Pantofast, Apo- Pantoprazole	Morning	Midday	Evening 1	Bedtime	To reduce acid secretion in the stomach for treatment and prevention of ulcers or reflux oesophagitis	NEW medication	Swallow tablets whole; do not crush or chew. Take regularly. If you are taking this medication for an ulcar, you should go to your doctor regularly for checkups to make sure that your ulcer has healed.

Stage 1 - HPS sample PSML



Consumer query: which medicines get uploaded to My Health Record?

I am taking a medicine that I would prefer does not get uploaded to My Health Record.



Consumer query: which medicines get uploaded to My Health Record?

I am taking a medicine that I would prefer does not get uploaded to My Health Record.

- People who have a My Health Record consented for their healthcare providers to view and/or upload dispense records
- ✓ You can withdraw consent and ask your pharmacist to not upload
- Once the record is uploaded this information can also be removed by the patient

- For instructions on how to withdraw uploading to MHR contact your software vendor or view software summary sheets available here: <u>https://www.myhealthrecord.gov.au/for-healthcare-professionals/clinical-softwaresummary-sheets</u>
- More information on how consumers can control access to documents is here: <u>https://www.myhealthrecord.gov.au/for-you-your-family/howtos/control-document-access</u>





Any questions so far?

Xavier Wiseman Patient Case Study



Meet Xavier Wiseman

- 70 years old
- Kirwan, QLD (Townsville)
- Married with 3 daughters
- Type 2 Diabetes, Hypertension, Hyperlipidaemia, GORD, Prostate Cancer, Glaucoma
- Daughter in UK recently had a baby Xavier went over for the birth of the baby
- On his return flight he started experiencing aching calf pain with swelling of the lower limb and was rushed to a hospital in Brisbane





Xavier in Brisbane Hospital

- Diagnosed with DVT of the left lower limb and was started on anti-coagulants (blood thinners)
 - Xarelto 15mg bd for 3 weeks, then Xarelto 20mg daily thereafter
- Cardiologist review whilst an inpatient
 - Changed Xavier's medicines to better control his hypertension
- Discharge Summary automatically uploaded to My Health Record





1 - https://www.psa.org.au/advocacy/working-for-our-profession/connecting-the-dots-digitally-empowered-pharmacists/

Townsville GP Review

- Xavier's regular GP away on leave, sees other GP in practice
- New GP reviews Discharge Summary uploaded by hospital in Brisbane
- Due to a number of medication changes (including new blood thinners), GP recommends for patient to see pharmacist for a Dose Administration Aid



			IF DOCUMENT	
thor Dr Terra hone 0455555	nce Walker(General Med			
dverse Reactions				
lverse Reactions	•			
ubstance/Agent			Manifestations	
etformin			Nausea	
CE Inhibitors			 Cough 	
ephalexin			Rash	
edications				
dications				
edication		Directions		Clinical Indication
iclazide 60mg Tablet, mo		1 Tablet In the morning		Diabetes Helitus, Type 2
rvezide 300/25 300mg;2		1 Tablet In the morning		Moderate, Chronic Hypertension
ntus Solostar 100U/ml Pr		1 Dose In the evening		Diabetes Helitus, Type 2
tanoprost /Timolol 0.005	%;0.5% Eye Drops	1 drop Before bed both	sides	Glaucoma
neprazole 20mg Tablet		1 Tablet In the morning	3	Moderate, Chronic Gastro-oesophageal Reflux
mvastatin 40mg Tablet		1 Tablet In the evening		Chronic Hyperlipidaemia
areito 20mg Tablet		1 Tablet In the morning	g with meals	Left Deep venous thrombosis
edical History				
 No Procedures are sup 	pplied			
dical History				
em			Date	
ft Tinea pedis			30 Jun 2019 ->	
ft Deep venous thrombos	is		25 May 2019 ->	
lateral Glaucoma			5 Jul 2015 ->	
ostate cancer			10 Oct 2012 ->	
abetes Mellitus, Type 2			3 May 2012 ->	
perlipidaemia			25 Feb 2010 ->	
ypertension			12 Mar 2009 ->	
astro-oesophageal Reflux			10 Jan 2008 ->	
mmunisations				
umunisations - Adminis	tered Immunisations			
accine		Sequence Number		Date
oostrix		1		10 Apr 2019
uvax		2		2 Apr 2019
neumovax 23		1		15 Nov 2018
uwax		1		18 Apr 2018
		ADMINIST	RATIVE DETAILS	
Patient			Author	
Name	Mr Xavier WISEMAN		Name	Dr Terrance Walker (General Medical
Sex Indigenous Status	Male Nother thesisted are	Territo Information	Organisation	Practitioner) Eagle Street Medical Practice
Indigenous Status Date of Birth	Neither Aboriginal nor 1 origin 3 May 1949 (70y)	orres Strait Islander	Work Place	400 George Street, Brisbane, QLD, 4000, Australia
IHI	8003 6086 6671 1130		Phone	04555555555 (Workplace)
Entitlements	6950432501 (Medicare	Benefits)	Clinical Document De	tails
			Document Type	Shared Health Summary
			Creation Date/Time Date/Time Attested	21 Aug 2019 11:27+1000 21 Aug 2019 11:27+1000
			Document ID	2.25.4994350652367455244855295574425833
			December 1 Feb 20	6751
			Document Set ID Document Version	32f14bc5-88a4-4d4d-95a2-3ce8d1ef2375

Shared Health Summar 21 Aug 2019



Australian Government Australian Digital Health Agency

Community Pharmacy

- Xavier visits regular community pharmacy and mentions GP wants him to begin on a Dose Administration Aid (DAA)
- Pharmacist looks up Xavier's latest Discharge Summary and Shared Health Summary on My Health Record
- Packs a DAA for Xavier
 - $\circ~$ Uploads a new Pharmacist Shared Medicines List (PSML) $\rightarrow~$
- Xavier mentions about his itchy feet, for which pharmacist diagnoses tinea pedia
 - Refers Xavier to a Podiatrist (referral point for type 2 diabetes)



WISEMAN, Xavier DOB: 03-May-1949 Gender: Male HHI: 800306806711130 Dr. John SMITH (Ph: 02.9563.4900) Pharmacist Name	Pha	REACTION Ramipril (Cephalexi		elling)
Date Prepared: 04/03/2019				
Current Medicines	Directions	Start Date	End Date	Status
Rivaroxaban 20mg tablet (cretio 20mg tablet)	1 morning with food (For: Anticoagulant)	04/03/2019		New
Gliclazide 60mg MR tablet	1 morning with food (For: diabetes)	04/03/2019		Edited
Irbesartan/Hydrochlorothiazide	1 morning (For: blood pressure)) 04/03/2019		Edited
Omeprazole 20mg tablet (Losso 20mg tablet)	1 night (For: GORD)	22/11/2018		Unchange
Simvastatin 40mg tablet (Zocor 40mg tablet)	1 night (For: cholesterol)	22/11/2018		Unchange
Insulin Glargine (Lantus Solostar Clausea)	Inject 12 units night (For: diabetes)	22/11/2018		Unchange
Latanoprost 0.005% eye drops (Xalatan 0.005% eye drops)	1 drop into both eyes (For: glaucoma)	night 22/11/2018		Unchange
PRN Medicines				
Drug	Directions	Start Date	End Date	Status
Ceased Medicines				
Drug	Cease Date Reason	n ogist review, drug inte	staction Ince	ased
Verapamil 240mg SR tablet	04/03/2019 Cardiolo Kasuado	de dose for better BF	control.	





Podiatrist

- Xavier's regular podiatrist hires room from local health hub centre
- Following pharmacists advice Xavier sees the podiatrist
- Podiatrist able to access information about recent admission and medicine changes from My Health Record
- Diagnosis of Tinea Pedis on left side is confirmed and treatment is put in place
- Podiatrist uploads an event summary

Event Summary 30 Jul 2019 Mr Xavier WISEMAN DoB 3 May 1949 (70y*) SEX Male IHI 8003 6086 6671 1130

Podiatry review:

History: Recently diagnosed with DVT of left lower limb Skin:

Itchy skin on left foot and between 4th and 5th toe No neuropathic pain, rest pain, intermitten claudication or foot ulcer

Examination: Skin: Rash: on Feet, Toe(s) No Infection, ulceration, skin breaks, calluses or corns. Nails are fine as well.

Foot Pulse: all present in both feet No signs of neuropathy

Footwear assessemnt: Style, condition and fit of foot wear are good.

Education need assessemnt:

Patient understands effects of diabetes on foot health as well as can identify appropriate foot care. Feet are adequetly cared for. There is no vision impairment or other factors influencing his ability to safely care of his feet.

Diagnosis: Left Tinea pedis

Reason for visit: Left Tinea pedis

rt Tinea pedis

Actions: Prescription marked as printed: Terbinafine 1% Cream 1 Daily As directed

Mangement:

Next review in 2 weeks

Medications

Medications			
Medication	Directions	Clinical Indication	Change Status
Terbinafine 1% Cream	1 Application Daily As directed		Changed (done)
Diagnoses/Interventions	s		
Medical History			
Item		Date	
Left Tinea pedis		30 Jul 2019	
	ADMINISTR	ATIVE DETAILS	



Case Study: how My Health Record helped



Medicines information and allergy data allowed better choice of medicine and better management - by hospital & specialist



GP able to review the discharge summary (from another city)



Pharmacy able to see above information and create a more accurate Pharmacist Shared Medicines List (PSML)



Podiatrist contributing to continuity of care



Digital Health has been associated with:

More coordinated and more efficient health care, predominantly from reducing delays in care and inappropriate care caused by communication gaps. Improvements in safety and quality of care from better system design, which can include decision support tools. Analysis of data in real time to provide more effective care Improved access to the skills and knowledge of health professionals through telehealth consultations and other time-efficient communication tools Greater patient engagement through patient and carer access to their own health information (transparency), personalised care, and selfmanagement tools that are curated and responsive to patient needs. System improvement and learning that are not possible with existing systems (e.g. data and analysis to support an evidence-based learning culture, data-driven system design).



https://www.psa.org.au/advocacy/working-for-our-profession/connecting-the-dots-digitally-empowered-pharmacists/

Australian Digital Health Agency

What's next?



Medicines safety program – 2020 outcomes

PSML

ePrescribing

Upload of Pharmacist Shared Medicines List (PSML) into My Health Record.

A new clinical document to the My Health Record. Solution Architecture and Conformance Framework codesigned with industry, clinicians, pharmacists, consumers, government (Commonwealth and jurisdictions). Digital Medicines Safety Blueprint

Launch of the Digital Medicines Safety Blueprint sets out 3 year action plan

Conformance

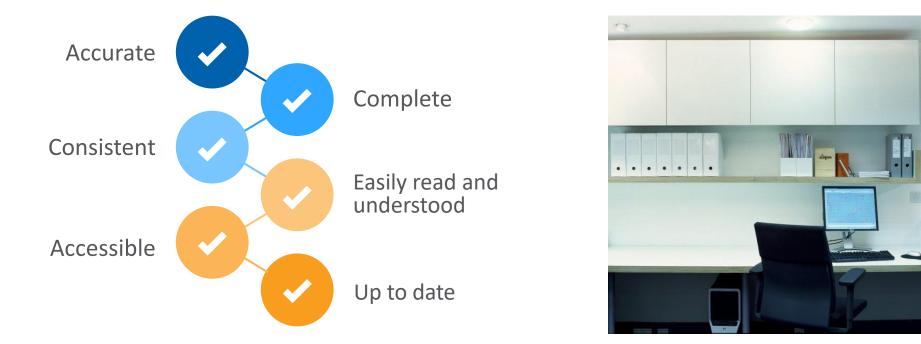
13 out of 14 dispensing software products are now MHR conformant



Australian Digital Health Agency

Importance of Data Quality







Support for formalising My Health Record Security & Access Policy

General Practice (RACGP) template:

https://www.racgp.org.au/running-apractice/technology/workplace-technologies/electronicrecords/my-health-record-in-general-practice/my-health-recordresources

Community Pharmacy (PSA) template:

https://www.psa.org.au/practice-support-industry/resources/

Hospitals:

Contact your local Health Information Manager for more information

My Health Record website:

https://www.myhealthrecord.gov.au/for-healthcareprofessionals/howtos/register-your-organisation

https://www.myhealthrecord.gov.au/for-healthcareprofessionals/howtos/my-health-record-system-participationobligations



Insert organisation name]			Insert vers
Governance			
Responsible Officer (RO)	(Ins	ert name]	
Organisation Maintenance Officer/s (OMO)	1.	[Insert name]	
	2.	[Insert name]	
	3.	[Insert name]	
	4	linsert namel	

Authorised staff will access the My Health Record system via:

An up-to-date list of individual healthcare providers authorised to access the P provided to the System Operator (SO) by:

Authorised staff will be provided with a unique user account to access the Mj system via conformant software by:

The level of access granted to individual staff will be determined and docume

Access flags will be assigned by:

Access records will be maintained by:

Security

User account information and access will be managed by:

Account passwords will be changed by users every:

Staff will report any suspected security breach to:

Confirmed security breaches will be reported to the relevant authority by

A log of security breaches including date and time of the breach, user account information accessed (if known), and mitigation strategies employed will be A risk assessment of information and communications technology (UT) syste mitigate operating lowsev and security risks associated with Mr Health Record

conducted every: Training

My Health Record system training will be organised for all authorised staff be the system by:

A register of staff training including the names of those who have completed training was completed will be maintain by:

Training will be reviewed to ensure currency and updated as required (i.e. if ne introduced into the system) every: Clinical incidents

Clinical incidents will be reported to the relevant party b





Healthy Profession Healthy Australia.

[insert practice name] My Health Record policy Current as of: [insert date of last revision]

Version no: [insert version number]

This policy provides guidance for staff and independent providers about access to and use of the My Health Record within our practice. It also provides guidance in the use of information technology in our practice as it relates to the My Health Record.

This practice's My Health Record policy is:

- drafted so that our practice can be audited against it to determine that the practice is in compliance with the policy
- kept up to date and reviewed at least annually and also when any new or changed risks are identified
- version-controlled so that each iteration contains a unique version number and the date when it came into effect
- · inclusive of definitions of the roles of responsible officer and organisation maintenance officer.

Responsible officer (RO) and organisation maintenance officer (OMO)

The following roles are responsible for implementation and compliance monitoring of the My Health Record policy in our practice:

- Our RO, [insert name of person assigned to the role of RO, and their position], oversees our
 practice's legal compliance and sets up procedures to facilitate compliance with the My
 Health Record legislation.
- Our OMO, [insert name of person assigned to the role of OMO, and their position], is responsible for implementation and compliance monitoring of the My Health Record policy, and for maintenance of the policy within our practice.

How the My Health Record is accessed in this practice

[Describe how individuals in your practice are authorised to access the My Health Record, including how access is suspended or deactivated when they leave the healthcare provider organisation, when their security has been compromised, or when their duties no longer require them to access My Health Record.]

At our practice we access the My Health Record via the [insert which software you use to access the system (gg) our practice cinical information system) and/or the provider portal. If you alwa access via the provider portal, your practice must establish and maintain with the System Operator an accurate and up-to-det liet of all identified healthcare providers who are authored to access the My Health Record system via or on behalf of the organisation using the provider portal under Saction 27 of the My health record Rules].



Australian Government







Questions ?



Australian Government

Australian Digital Health Agency

Further information and support



My Health Record Web: <u>www.myhealthrecord.gov.au</u> My Health Record Help line: 1800 723 471



Australian Government

Australian Digital Health Agency

Australian Digital Health Agency (ADHA)Web:www.digitalhealth.gov.auEmail:help@digitalhealth.gov.auPhone:1300 901 001

