



Sparked Webinar: Get SMART with FHIR

Wednesday 12 February 2025
12pm AEDT



Acknowledgement of Country

We acknowledge the Traditional Custodians of the land on which we all gather today.

We pay our respect to elders past, present, and emerging and extend our respect to all Aboriginal and/or Torres Strait Islander people, acknowledging the First Peoples as the first scientists, educators and healers.



Webinar objectives



Overview of existing and future opportunities for FHIR enabled clinical workflows



Exploring how FHIR and national data standards can be used to support different clinical initiatives

Agenda



Time	Topic	Presenter/Facilitator
12:00pm (5mins)	Welcome	Tor Bendle
12:05pm (15mins)	Introduction & Perspective: CSIRO Aboriginal & Torres Strait Islander Health Check	Liam Barnes (CSIRO)
12:20pm (10mins)	Perspective: Australian Digital Health Agency Comprehensive Health Assessment Program	Ian Davies (Australian Digital Health Agency)
12.30pm (10mins)	Perspective: Heart Foundation Aus CVD Risk-i, the Australian cardiovascular disease risk calculator	Lisa Kalman (Heart Foundation)
12.40pm (15mins)	Perspective: Women's Health Road & MediRecords Women's Health – Heavy Menstrual Bleeding Model	Dr Talat Uppal (Women's Health Road) Jayne Thompson (MediRecords)
12.55 (5mins)	Q&A and Close	Kylynn Loi / Tor Bendle

- Submit questions as we go, and we will do our best to answer during Q&A
- Please let us know future webinar topic suggestions by emailing Sparked@csiro.au



Aboriginal & Torres Strait Islander Health Check

Liam Barnes
CSIRO Australian eHealth Research Centre

Modern Technology Standards



Designed by macrovector / Freepik

- Changing healthcare delivery needs
- App innovation
- Security and privacy
- Interchangeable applications

SMART on FHIR

Substitutable Medical Applications, Reusable Technologies

Key features		Standard
Interoperability	Integration with EHR systems standardised information exchange	FHIR
Security	Secure and seamless access to health data	OAuth2 OpenID Connect
User authorisation	Allows users to grant applications access to specific data	SMART
Clinical scopes	Defines an application's access rights to FHIR resources	SMART

Smart Forms Objectives

- Forms based solution for health assessments
- Foundational standards in primary care
- Data quality improvement
- Improve efficiency for delivering clinical care

Technology principles

- Capable of integrating into existing clinical systems
- Data exchange and reuse
- Open-source
- Reusable technology
- Standards-based

Smart Forms Standards

SMART App Launch

- Connects applications to EHR data
- Secure
- Interoperable
- Patient centric

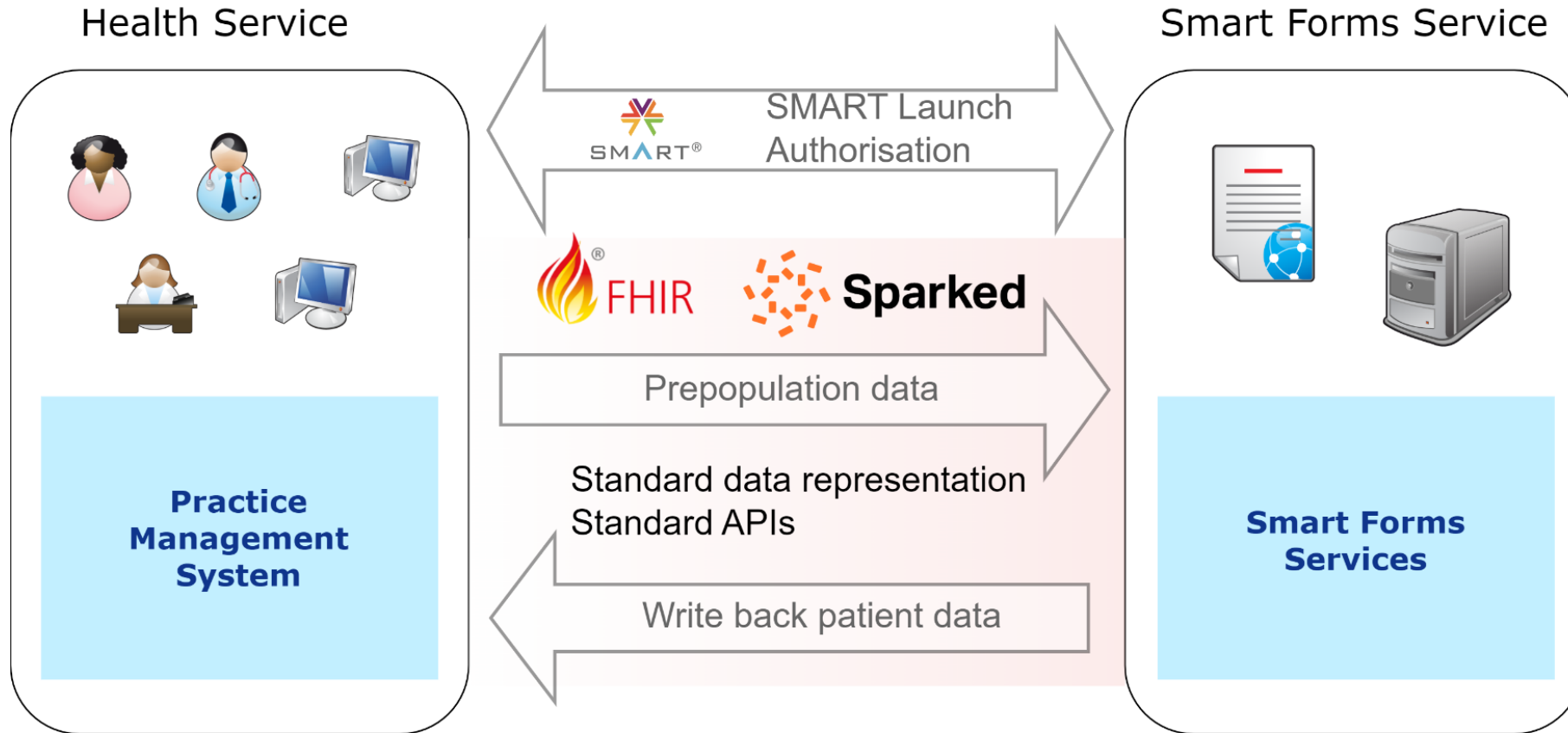
FHIR + AU Core

- Information exchange between systems
- National specifications

Structured Data Capture (SDC)

- Pre-population
- Dynamic behaviors
- Calculations
- Data extraction
- Modular and adaptive

Integration Interface



Integration Requirements

Baseline capabilities required from a launching system

- SMART App Launch (EHR Launch)
- AU Core (Responder/Server)

National SMART App Initiatives

- First Nations Peoples Health Check
 - Smart Forms App
- Comprehensive Health Assessment Program (CHAP)
 - Smart Forms App
- Aus CVD Risk-i Calculator
 - SMART App
- + more

FHIR Server requirements

Resource interactions	SMART Apps			
	Common	First Nations Health Check	Agency Forms App (CHAP v1)	CVD Risk-i Calculator
Read & Search	Practitioner Patient	Encounter Condition Observations QuestionnaireResponse	QuestionnaireResponse	Encounter Condition Observations MedicationRequest Medication Observation (Sitting BP)
Create & Update		QuestionnaireResponse	QuestionnaireResponse	Observation (CVD Risk Result)

- AU Core (Responder)
- Smart Forms

Smart Health Checks

Aboriginal and Torres Islander Health Check Assessment

- Smart Forms software
- FHIR Implementation Guide

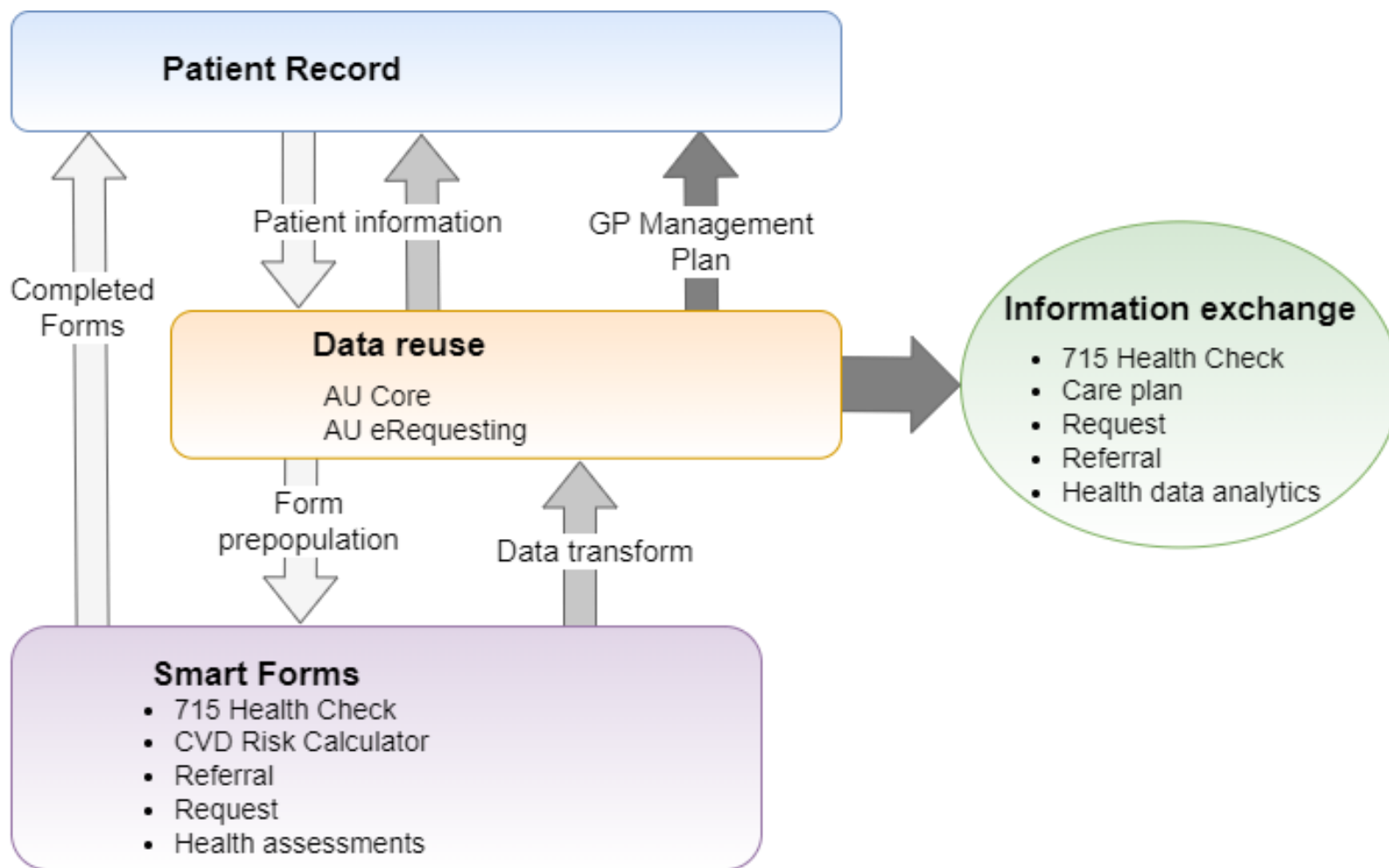
Thanks to the sponsor

First Nations Health Division, Department of Health and Aged Care

Up next

- Proof on concept trial
- National piloting
- Evaluation
- National rollout
 - Increase adoption of the Health Check
 - Enhance clinical care delivery

Data reuse



Thank you

Australian e-Health Research Centre

Liam Barnes

liam.barnes@csiro.au

Australia's National Science Agency





Comprehensive Health Assessment Program (CHAP)

Ian Davies
Australian Digital Health Agency

CHAP and SMART National Infrastructure

Sparked Webinar – 12 February 2025



Australian Government

Australian Digital Health Agency



Comprehensive Health Assessment Program (CHAP) integration



Part 1: Completed by the person with intellectual disability or their carer



Part 2: Completed by the GP

Part 1 – For the Person with Disability
 Please tick the boxes below if the person has experienced any of the following signs and symptoms in the **last year**.
 If you are unsure or don't know the answer, please tick the 'unsure/don't know' box.
 To make an accurate medical assessment of the person's health, the doctor needs to know about these signs and symptoms.

	Yes	No	Unsure/ don't know
1. Breathing system			
Does the person cough?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person cough up blood ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person cough up stuff/mucous/sputum ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person get short of breath ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person wheeze ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Heart system			
Does the person have chest pain ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person's heart 'race' beat quickly ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do the person's ankles swell ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person get short of breath while lying in bed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person get a blue tinge to their skin (for example, fingers/tips/toes)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Muscles & Joints			
Does the person have joint pain or back pain ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person have muscle pain ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Gastrointestinal system			
Has the person lost weight ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person have trouble swallowing ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person regurgitate/vomit ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person get heartburn ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person have diarrhoea ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person have black bowel motions/faeces ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person get constipated ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person lose control of bowel movements ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the person have abdominal/stomach pain ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



1. Check

Height cm

Weight kg

Blood Pressure mmHg

Pulse Rate BPM

If the person has a weight / blood pressure problem, please specify action recommended or taken:

Weight control

Hypertension

Is waist measurement necessary? Yes No

2. Systems check
 Please perform a complete comprehensive physical examination

New findings

Cardiovascular

Respiratory

Musculo-skeletal

Renal / urogenital

Endocrine

Gastrointestinal

Nervous

Psychiatric/
Behavioural

Skin

3. Mental health
 People with intellectual disability have very high rates of mental ill health which is often unrecognized.
 Is there any evidence of a comorbid psychiatric disorder?



GP Clinical Information Systems

eHRP Demonstrator

GP Medical Centre | Home | GP Medical Centre | S&K | Hospital | Specialist | Pharmacy | My Health Record | Pathology Lab | Administration | About

GP Medical Centre | Note: This demonstrator screen is not intended to showcase a complete solution and is not suitable for implementation.

HARDING, Frank | Gender: Female | DOB: 04-Oct-1949 (75 yrs) | PH: 8003-6086-6670-1594 | My Health Record Access | Change | Provider: GP

Patient History | Create Document | Reconciliations

Medical History (11)

Allergies & Adverse Reactions (5)

Medicines (8)

Immunisations (0)

Diagnoses (8)

Service Requests (1)

Inbox (1)

Links

My Health Record

Medicines

- 06-May-2020 ibuprofen 200 mg tablet, 30
- 23-Mar-2020 ibuprofen200 mg tablet, 30
- 28-Feb-2020 Aspirin 100 mg, 30
- 28-Feb-2020 Imuran 25 mg tablet: film-coated, 100
- 14-Oct-2019 Nurospan 10 microgram/hour patch, 2

Medical History

- 06-May-2020 Painful legs and moving toes
- 20-Mar-2020 depression screening
- 28-Feb-2020 Borderline blood pressure
- 28-Feb-2020 Colonoscopy
- 27-Dec-2013 Degenerative spondylolisthesis

Allergies & Adverse Reactions

- 06-May-2020 Cowdard leaf
 - Fever
- 23-Mar-2020 pumpkin seed
 - Wounding
 - Itching
- 20-Mar-2020 Colchicine
 - Rash

Australian Government | Australian Digital Health Agency | Version 1.2.7818.30045

Screenshot: selecting forms

Available forms

Tyler Crick 75 years old

- Available forms
- About us
- Help
- Feedback

Available forms

- Intellectual disability assessment →
- Aboriginal and torres strait islander health assessment →

[Terms of Use](#) © 2025 Australian Digital Health Agency | v1.31 Jan 2025



Screenshot: patient background information

Intellectual disability assessments ✕

Tyler Crick 75 years old Cerebral Palsy Autism

[← Back to Getting Started](#) Form Aetiology guide

1. Background	1/3
2. Part 1 & aetiology	0/3
3. Basic examinations	0/8
4. Full examinations	0/11
5. Epilepsy	0/2
6. Mental health	0/4
7. Health screening	0/10
8. Vaccinations	0/10
9. Final checks	0/5
10. Action plan *	

Background

Enter the following information about the patient you are doing the assessment for and the person(s) attending with them.

Last contributor
Jenny Evans - last updated 23 Oct 2024, 11am

1. Who is the patient?

Patient's first name

Patient's last name

2. Who is attending with the patient?

Select a role

Their first name

[← Previous](#) [Next >](#) [Park](#) [Done](#)



Screenshot: basic examinations

Intellectual disability assessment ✕

Tyler Crick 75 years old Cerebral Palsey

[Back to Getting Started](#) Form Aetiology guide

- 1. Background 1/3
- 2. Part 1 & aetiology 0/3
- 3. Basic examinations 0/8**
- 4. Full examinations 0/11
- 5. Epilepsy 0/2
- 6. Mental health 0/4
- 7. Health screening 0/10
- 8. Vaccinations 0/10
- 9. Final checks 0/5
- 10. Action plan *

Basic examinations

Common problems
For syndrome specific list of common problems, [view the Aetiology Guide](#)

Unable to populate observations ✕
We were unable to pull in the observations from <Tyler's> record. Please measure the following observations.


1. Can you check the following observations?

Already recorded in patient file
 Unable to check
 Yes

Height
 cm

Weight
 kg

[Previous](#) [Next](#) Park Done



Screenshot: aetiology guide (which conditions are highly correlated with which symptoms)

Intellectual disability assessment

Tyler Crick 75 years old Cerebral Palsy

[Back to Getting Started](#) January 2025 **Aetiology guide**

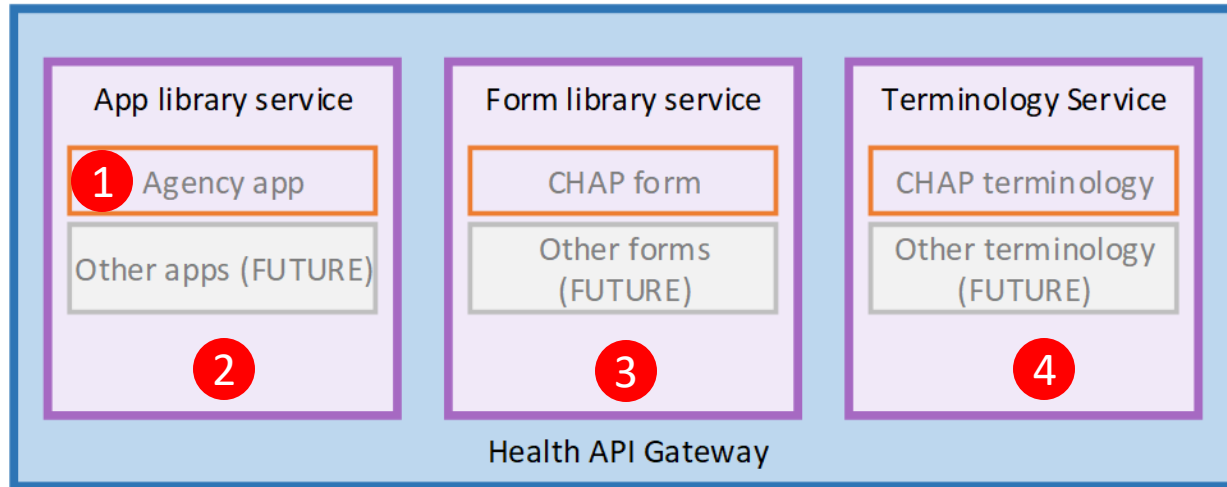
Aetiology guide

Angelman Syndrome (1:10,000-52,000)

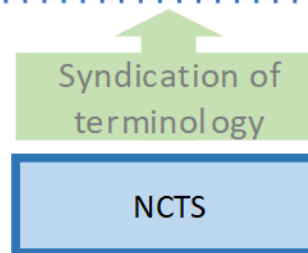
System	Symptoms
Audiovisual	<ul style="list-style-type: none">GlaucomaStrabismus is possible
Endocrine	
Psychiatric or Psychological	<ul style="list-style-type: none">Easily excitableHyperactiveIntellectual disability
Central nervous system - C.N.S.	<ul style="list-style-type: none">Epilepsy
Cardiovascular	
Musculo-skeletal	<ul style="list-style-type: none">Joint contractures & scoliosis (in adults)
Additional	<ul style="list-style-type: none">Speech impairmentMovement & balance disorderCharacteristic EEG changesGastrointestinal problemsOrthopaedic problems

[Back to form](#)

New “national infrastructure” (~July 2025)



National infrastructure services to provide access to apps, forms and terminology




1. National SMART forms app
2. SMART app hosting service
3. Forms hosting service / repository
4. Terminology service (Ontoserver)

Possible future directions

National Foundation FHIR Implementation Guides (IGs)

- National Foundation IGs:
 - A place for common requirements
 - App-specific IGs could be derived from foundational IGs
- Candidates for consideration:
 - National SMART Apps
 - National Questionnaire/Forms/Structured Data Capture





Aus CVD Risk-i, the Australian cardiovascular disease risk calculator

Lisa Kalman
Heart Foundation



Integration of Aus CVD Risk into GP software

Transforming Aus CVD Risk into Aus CVD Risk-i

Lisa Kalman

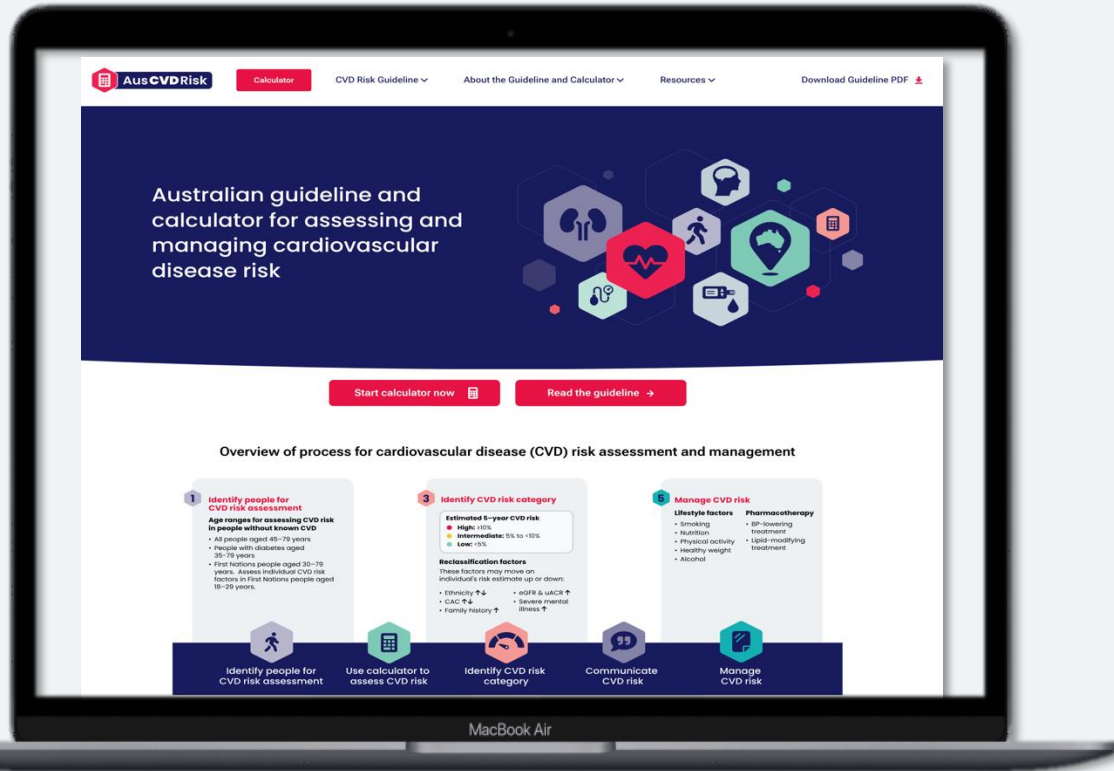
National Heart Foundation of Australia

Agenda

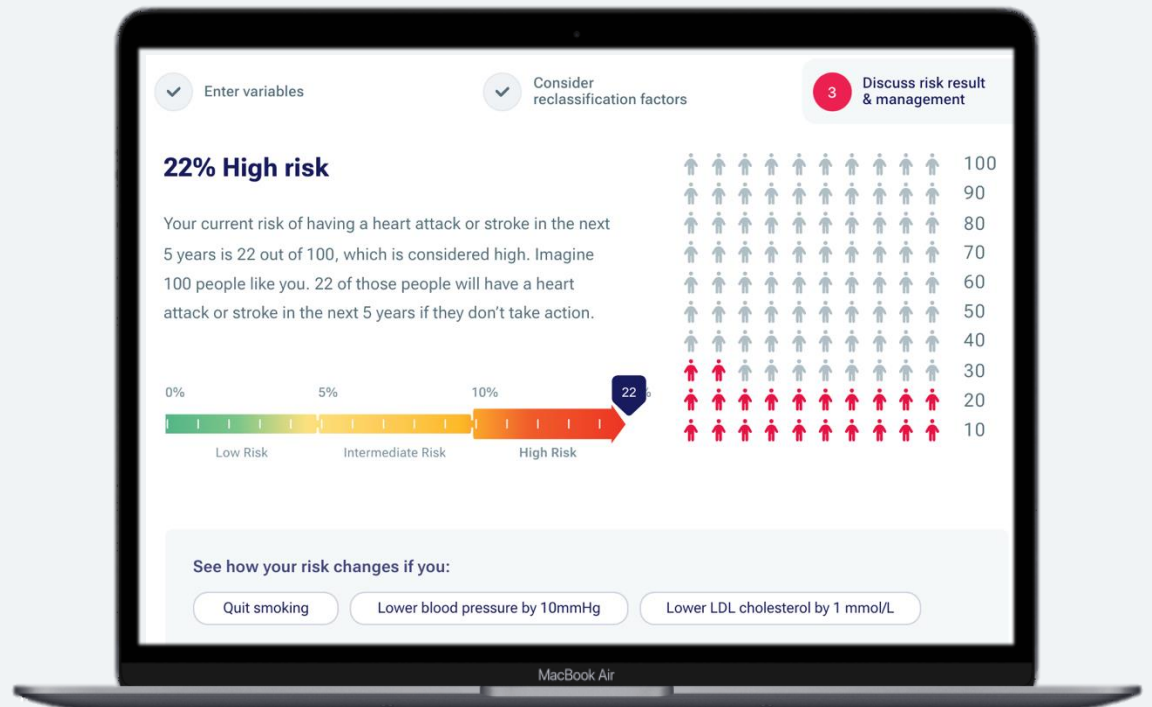
- Background – What is Aus CVD Risk?
- Why SMART on FHIR interoperable path
- Learnings and insights



Background – What is Aus CVD Risk?



www.cvdcheck.org.au



Introducing Aus CVD Risk-i

Aus CVD Risk

- Calculator used in primary care to determine a person's risk of cardiovascular disease
- Openly accessible online

Aus CVD Risk-i

- SMART on FHIR version of Aus CVD Risk
- Application for integration





Why SMART on FHIR interoperable path?



One source of truth

Standardised way of representing data

Optimised workflows for clinicians

Optimised health outcomes for people



Learnings and insights



Thank you!

Lisa Kalman

National Heart Foundation of Australia



Women's Health – Heavy Menstrual Bleeding Model

Dr Talat Uppal
Women's Health Road

Jayne Thompson
MediRecords



WOMEN'S HEALTH ROAD
— AUSTRALIA INCORPORATED —

HEAVY MENSTRUAL BLEEDING National Model of care

Dr Talat Uppal

Director, Women's Health Road

Email: drtalat@womenshealthroad.com.au

Khika Withnell

Practice Manager

Email: khika@womenshealthroad.com.au

Sarah Yeomans

Medical Practice Assistant

Email: sarah@womenshealthroad.com.au

Dr Megan Young

Women's Health GP

Dr Sisi Zhao

Women's Health GP

Phone: [\(02\) 8328 0670](tel:(02)83280670)

www.womenshealthroad.com.au



Acknowledgement of Country

We recognise the traditional custodians of the land and sea on which we live and work.

We pay our respects to Elders past, present and emerging.



Dr Talat Uppal - DISCLOSURES

Bayer Media Spokesperson HMB Period Perspective
Bayer APAC Digital Thought Leader Academy program
Bayer Renumerated GP Education Sessions
Orion Renumerated GP Education Sessions
Organon renumerated Implanon trainer
Besin renumerated GP teaching sessions
CSL Vifor renumerated speaker
Ambassador for Heidi Health
Ambassador for Remie Australia
RANZCOG Media Spokesperson

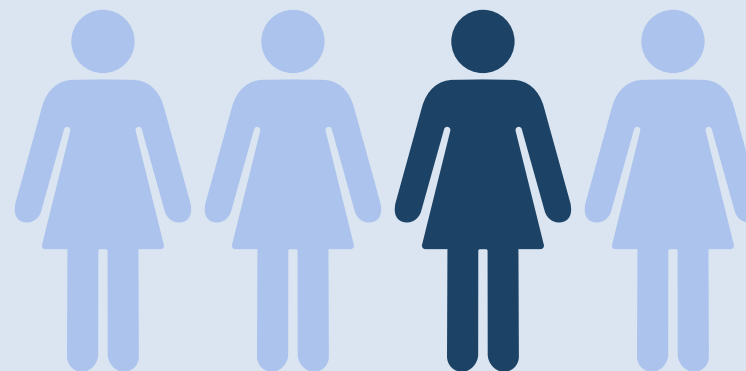
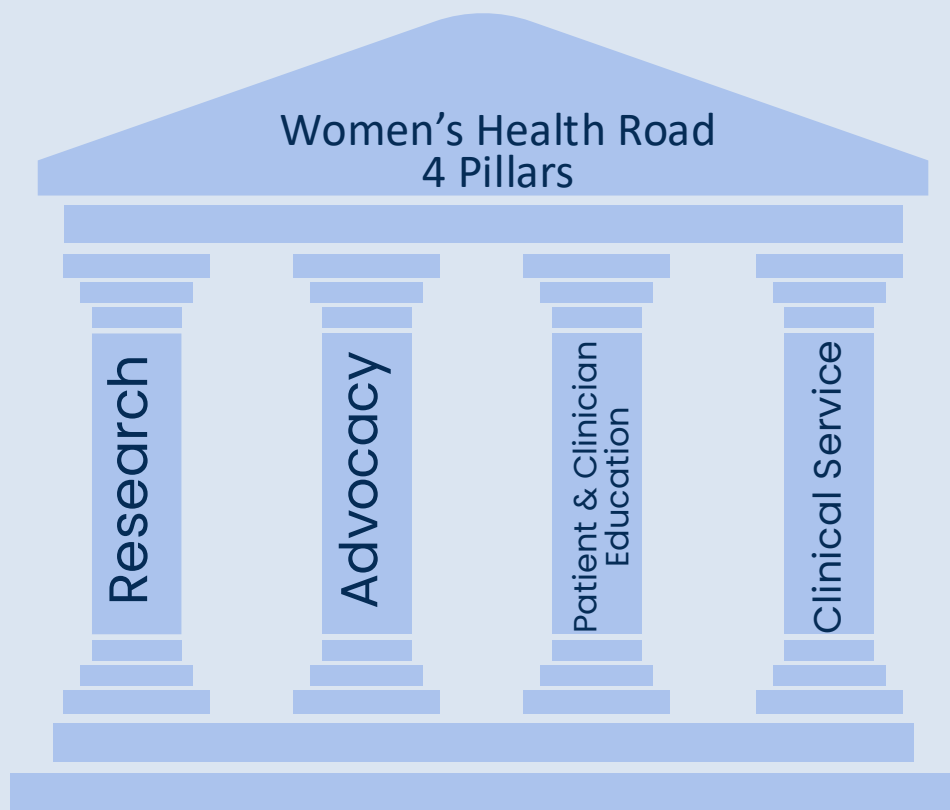
ACCREDITATIONS:



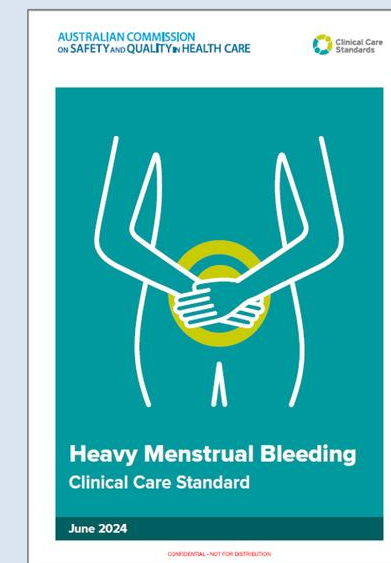
Australia's first AUB Hub

Heavy menstrual Bleeding

An opportunity for Australia to lead the way in women's health



a common but treatable condition



strategic collaboration with key partners and Stakeholders

- **MediRecords** - FHIR compatible, EMR
- **GE Healthcare** - Ultrasound
- **Lumicare** - Ultrasound probe sanitising
- **Bayer** - LARC (Mirena & Kyleena)
- **Heidi Health** - AI scribe
- **Remie Australia** - Offsite Admin Support
- **ERICOM** - IT Management
- **Telstra Health** - EMR enhancement
- **Hologic** - Novasure & Myosure, IHMB Day sponsors

Academic Institutions:

- Macquarie University - Prof Enrico Coiera and Abraham Bisseh
- Western Sydney University - Prof Mike Armour and Prof Robert Gorkin
- University of Queensland - Prof Gita Mishra and Prof Jenny Doust
- RANZCOG
- RACGP
- ASUM
- FIGO
- CSIRO
- Practera

The Heavy Menstrual Bleeding Pathway

Women's Health Road

Developed by Khika Withnell and Sarah Yeomans

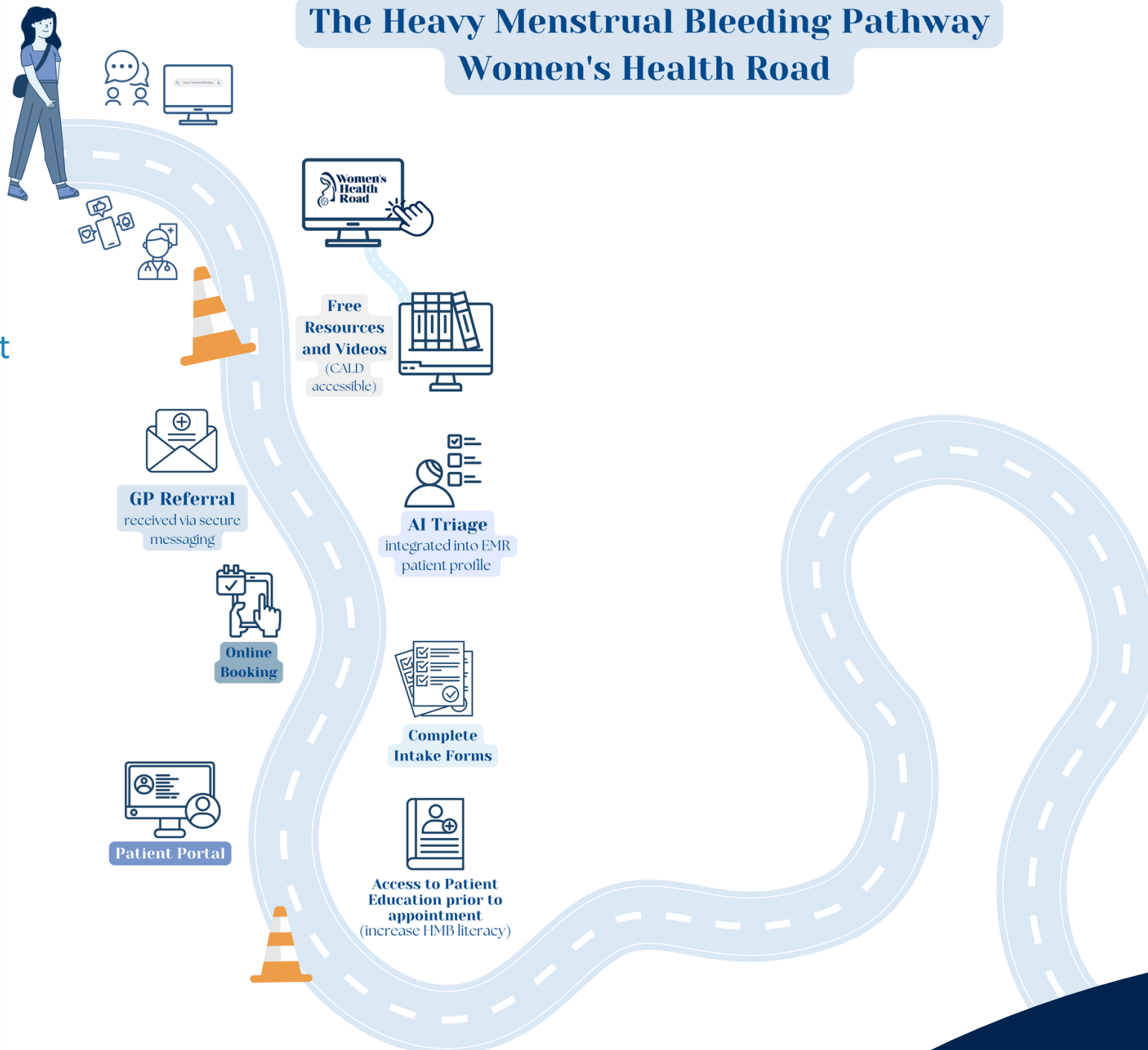


The Heavy Menstrual Bleeding Pathway

Women's Health Road



Sector 1 - Patient Entry



Sector 1 - Patient Entry



successes

1. Data bank of patient education documents



1. Remie offsite admin team supporting patient intake and administrative tasks

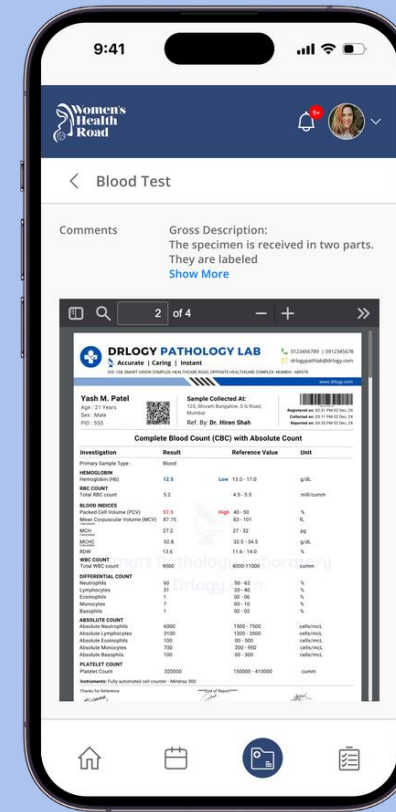
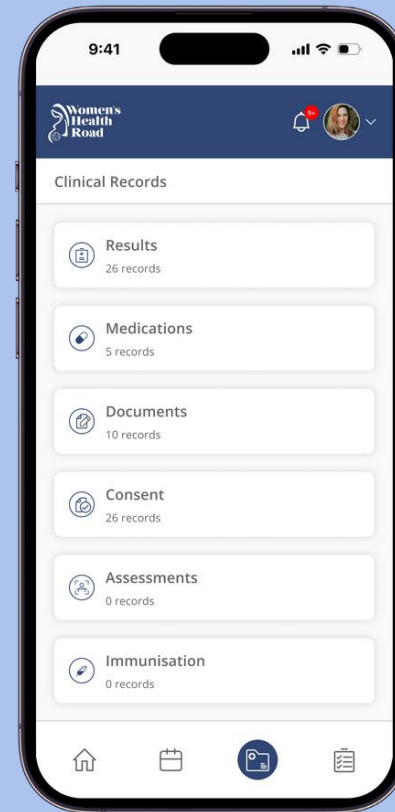
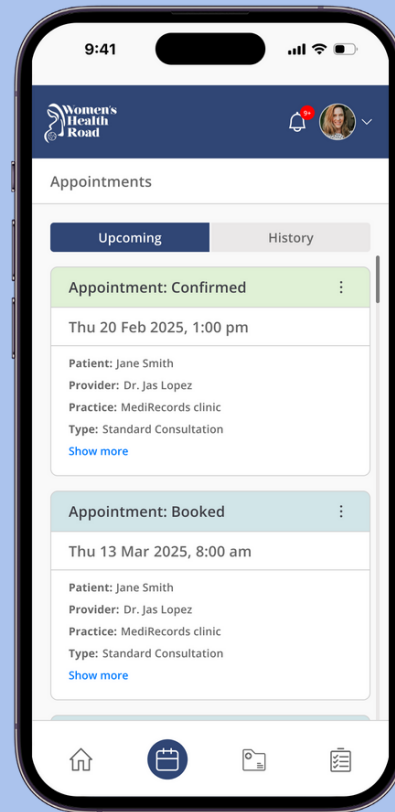
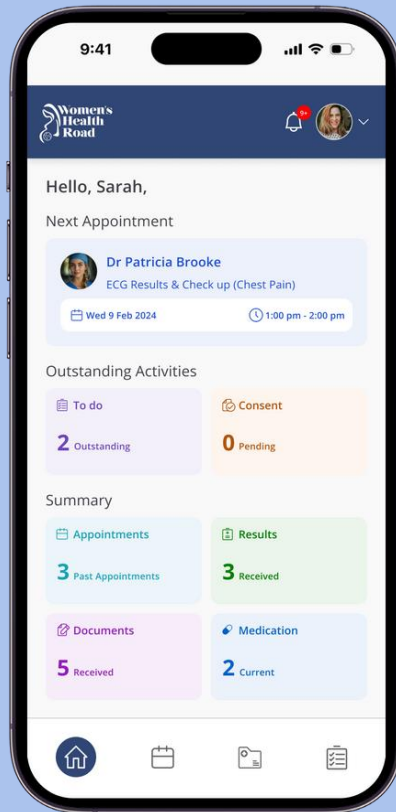
REMIE

Improvements

1. Online Patient Booking
2. CSIRO Smart Forms for intake
3. MR Engage patient platform
4. AI triage of referrals via **ConsultMed**

sector 1 improvement:











Medirecords 'engage' patient platform and online booking



sector 1 improvement: CSIRO SMart forms for patient intake

Questionnaires

Looking for something else? Refine your search in the search bar.

Title	Publisher	Date	Status
 BootcampVSDemo	-	February 1, 2025	Draft
 Chronic Condition Management Plan 1	-	January 29, 2025	Draft
 AU Patient Summary Test Data - update or create	-	January 14, 2025	Draft
 AU Patient Summary Test Data	-	January 14, 2025	Draft
 CalculatedExpression BMI Calculator - Pre-population	AEHRC CSIRO	December 18, 2024	Draft
 Radiology Request Form (multifield demonstrator)	AEHRC CSIRO	September 3, 2024	Draft
 Conceptmap Translate Demo	AEHRC CSIRO	August 14, 2024	Draft
 Opioid Risk Form	Vikram Rajan	July 21, 2024	Active
 Pathology Request Form	AEHRC CSIRO	July 16, 2024	Draft
 Radiology Request Form	AEHRC CSIRO	June 26, 2024	Draft

Rows per page: 10 1-10 of 45



Dr M Talat Uppal
Gynaecologist
6 Hilmer Street,
Frenchs Forest NSW 2086

Gynaecology Patient Questionnaire

This questionnaire allows more efficiency to spend quality time engaging and making individualised, holistic health care for you. Please provide a copy of any previous **Pelvic Ultrasound Scans** or **Pathology results** prior to, or on the day of your initial appointment.

First Name _____ Surname _____
Contact number _____ Email _____

Please outline your main health related concerns that I can help you with:

Please list any **allergies** you are aware of and the nature of reaction that occurs when exposed (include severity):

MENSTRUAL HISTORY:

How old were you when your first period started? ____

Date your last period began: ____ How many days do your periods last? ____

How long is your cycle? (e.g., 28 days, less than 28 days) ____

SEXUAL HISTORY:

What contraception, if any, are you currently using? For how long?
(e.g. condoms, contraceptive pill, IUD etc.)

What contraception options, if any, have you used in the past?

Are you currently sexually active? Yes No

Do you experience any bleeding after sexual intercourse? Yes No

Do you experience any excessive pain during sexual intercourse? Yes No

If yes, how would you describe this pain on a scale from 1 – 10?

1 2 3 4 5 6 7 8 9 10
Mild Pain Moderate Pain Severe Pain





Patient Portal

All results, notes, education, etc. centrally located in EMR for MDT access & patient transparency



Access to Patient Education prior to appointment (increase HMB literacy)

Scripts and/or referrals provided as needed

Genetics testing
Mefenamic acid
HRT
Tranexamic acid
Iron Infusion



Pathology
Radiology
Oncology
LARC

Detour
Revision



Ongoing patient monitoring and care with collaborative GP management



Initial Consultation
In-person
Telehealth
AI-supported Clinical Notes



Equipment sterilisation

Bloods drawn

Swabs

Biopsies

LARCs

CST

Vulvoscopy

Colposcopy



Ultrasound



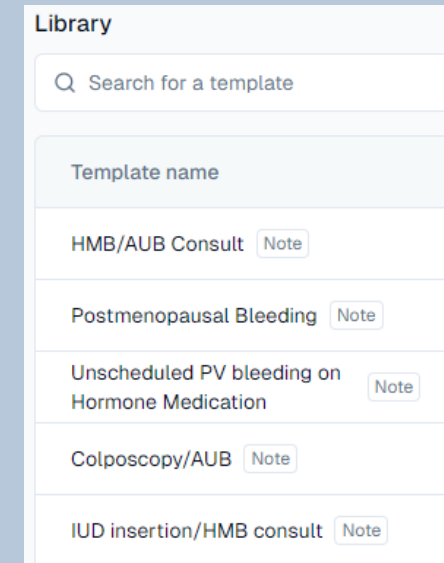
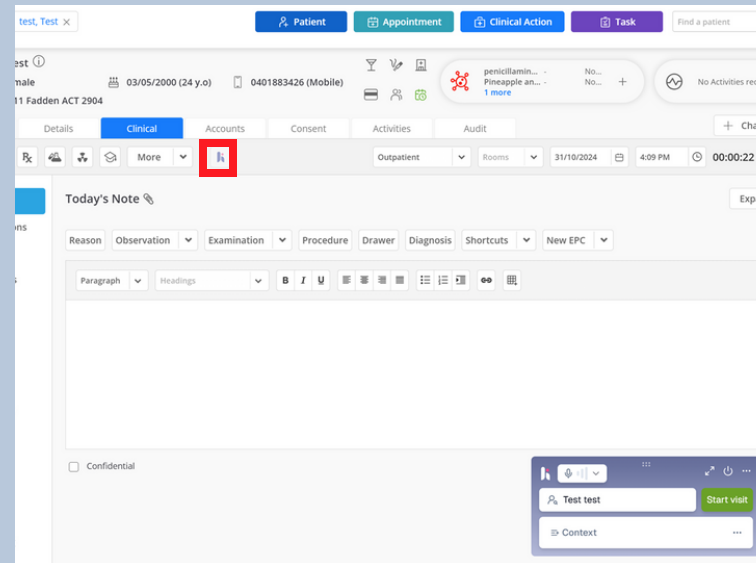
Prescriptions

Sector 2 - Initial Consultation and Creation of Management/Treatment Plan

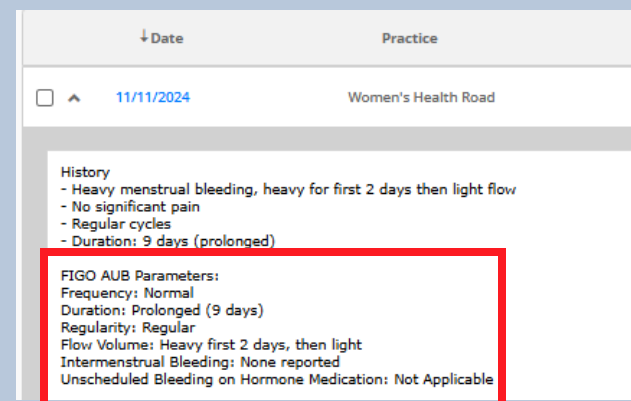
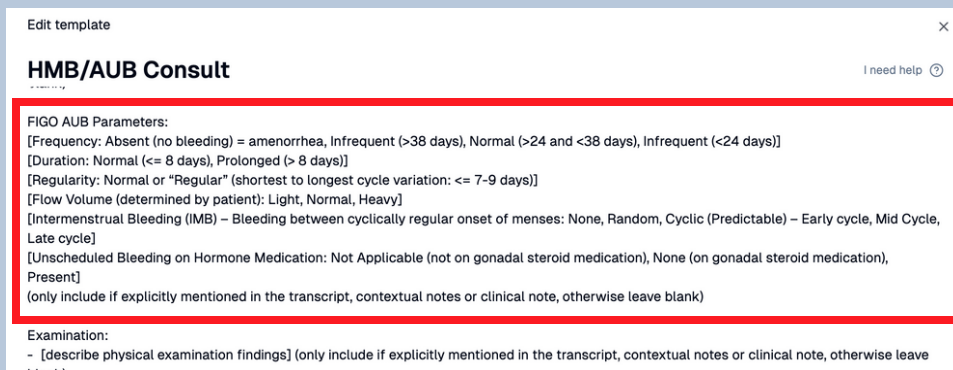
sector 2 success:

Emr-integrated AI Scribe via Heidi HHealth + FIGO AUB Parameters

Category	Normal	Abnormal	<input checked="" type="checkbox"/>
Frequency	Absent (no periods or bleeding) = amenorrhea		<input type="checkbox"/>
	Frequent (<24 days)		<input type="checkbox"/>
	Normal (24 to 38 days)		<input type="checkbox"/>
Duration	Infrequent (>38 days)		<input type="checkbox"/>
	Prolonged (>8 days)		<input type="checkbox"/>
Regularity	Normal (up to 8 days)		<input type="checkbox"/>
	Regular variation (shortest to longest ≤ 9 days)		<input type="checkbox"/>
Flow volume	Irregular (shortest to longest 10+ days)		<input type="checkbox"/>
	Heavy		<input type="checkbox"/>
	Normal		<input type="checkbox"/>
Intermenstrual Bleeding (IMB) Bleeding between cyclically regular onset of menses	Light		<input type="checkbox"/>
	None		<input type="checkbox"/>
	Random		<input type="checkbox"/>
	Cyclic (Predictable)	Early Cycle Mid Cycle Late Cycle	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Unscheduled Bleeding on Hormone Medication (eg Birth Control Pills, Rings or Patches)	Not Applicable (not on hormone medication)		<input type="checkbox"/>
	None (on hormone medication)		<input type="checkbox"/>
	Present		<input type="checkbox"/>



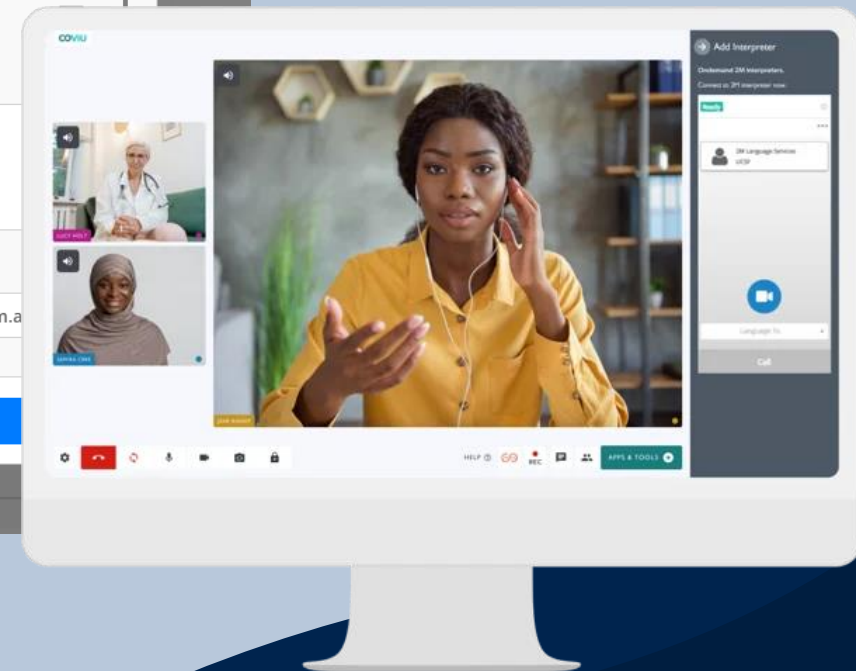
Templates Created by Sarah Yeomans for the tenanted clinicians at Women's Health Road



sector 2 success:

EMR-integrated tELEHEALTH

EMR interface showing an "Edit Appointment" window. The window has tabs for "Appointment", "Unavailable", "Existing", "New", and "Wait List". The "Appointment" tab is selected. Below the tabs are radio buttons for appointment status: "Booked", "Confirmed", "Waiting Room", "With Provider" (selected), "At Billing", and "Completed". There are "Cancel" and "More" buttons. The "Patient Name" field contains "test. Test" and has an information icon. A red box highlights the text "TeleHealth Consultation" next to the patient name field. Below this is a "Notes" section with a text area labeled "Enter Notes". At the bottom, there are fields for "Home Phone", "Mobile Phone" (containing "0401883426"), "Contact By" (with a dropdown menu), and "Email" (containing "admin@womenshealthroad.com.a"). A "Cancel" button is at the bottom right.



sector 2 Improvement: CST and colposcopy reporting integration

NATIONAL
CERVICAL SCREENING
PROGRAM
A joint Australian, State and Territory Government Program

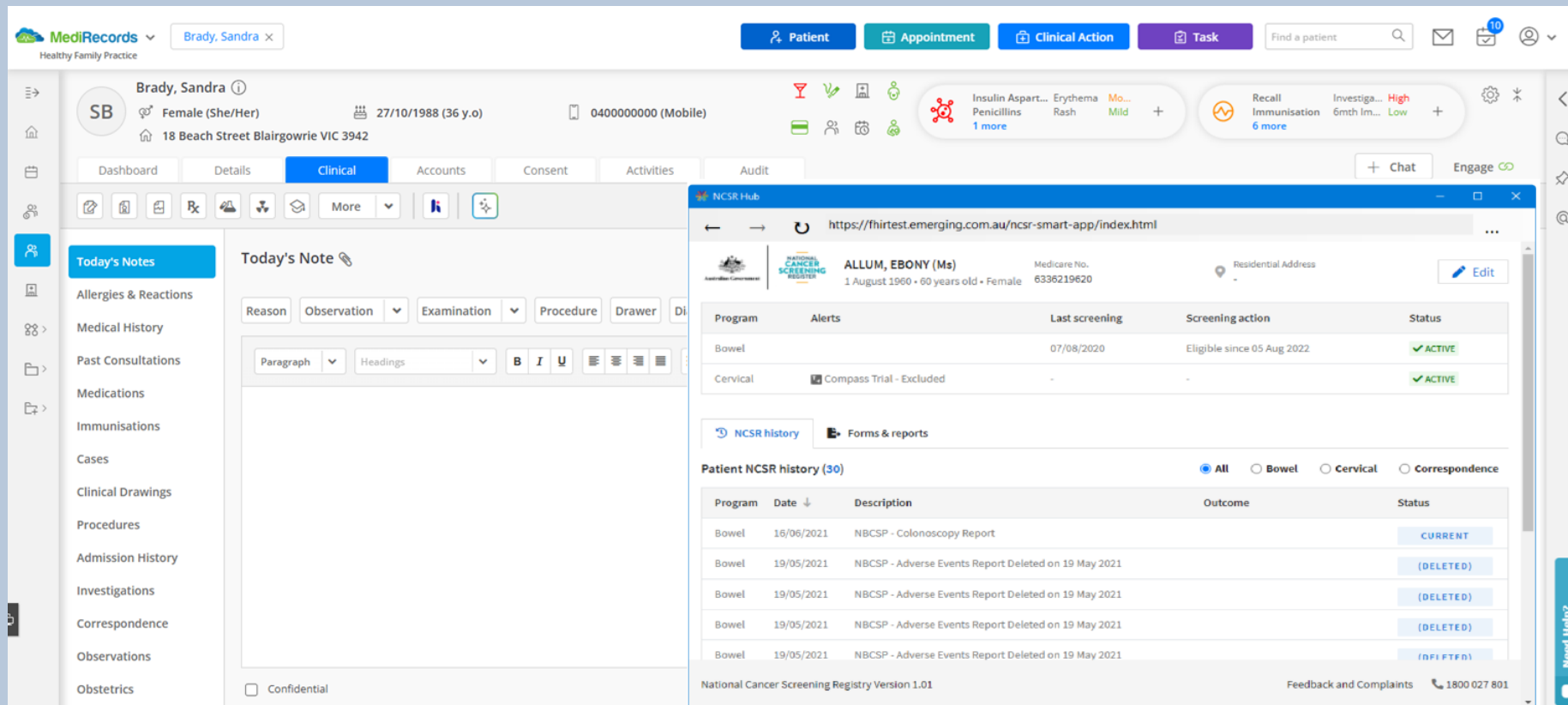
COLPOSCOPY & TREATMENT FORM

How to lodge this form

The original copy of this form can be lodged with the Register:

- Post to National Cervical Screening Program, Reply Paid 90964, SUNSHINE VIC 3020, or
- Fax on 1800 627 702.

For assistance please call the NCSR on 1800 627 701.



The screenshot displays the MediRecords interface for patient Sandra Brady. The patient's details include: Female (She/Her), 27/10/1988 (36 y.o.), 0400000000 (Mobile), and 18 Beach Street Blairgowrie VIC 3942. The interface shows various tabs like Dashboard, Details, Clinical, Accounts, Consent, Activities, and Audit. A 'Today's Note' section is visible with a rich text editor. A browser window is open, showing the NCSR Hub interface for patient ALLUM, EBONY (Ms), Medicare No. 6336219620. The NCSR Hub interface includes a table for Alerts and a Patient NCSR history table.

Program	Alerts	Last screening	Screening action	Status
Bowel		07/08/2020	Eligible since 05 Aug 2022	ACTIVE
Cervical	Compass Trial - Excluded	-	-	ACTIVE

Program	Date	Description	Outcome	Status
Bowel	16/06/2021	NBCSP - Colonoscopy Report		CURRENT
Bowel	19/05/2021	NBCSP - Adverse Events Report Deleted on 19 May 2021		DELETED
Bowel	19/05/2021	NBCSP - Adverse Events Report Deleted on 19 May 2021		DELETED
Bowel	19/05/2021	NBCSP - Adverse Events Report Deleted on 19 May 2021		DELETED
Bowel	19/05/2021	NBCSP - Adverse Events Report Deleted on 19 May 2021		DELETED

sector 2 Improvement: diagnosis tracking

New Condition

Existing Condition: Yes No

Onset Date: 10/01/2025

Add to PMH: Yes No

Condition *:

Accurate to: Accuracy

Active: Yes No

Position: Position

Confidential: Yes No

Condition: Condition

Include in Summaries: Yes No

Severity: Severity

Save as reason for visit: Yes No

Fracture: Fracture

Send to My Health Record: Yes No

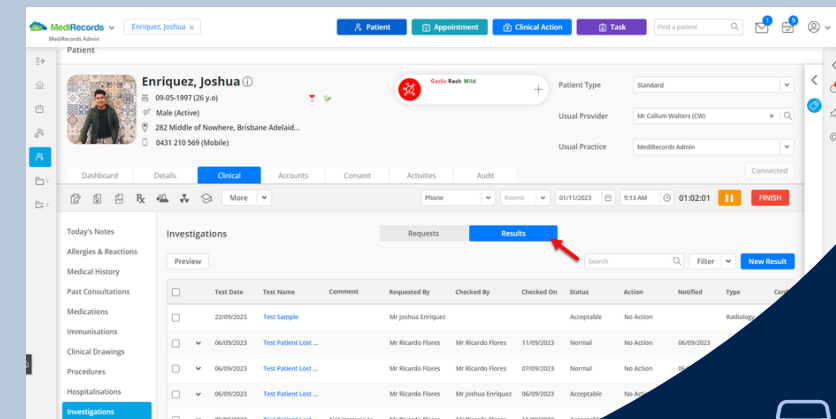
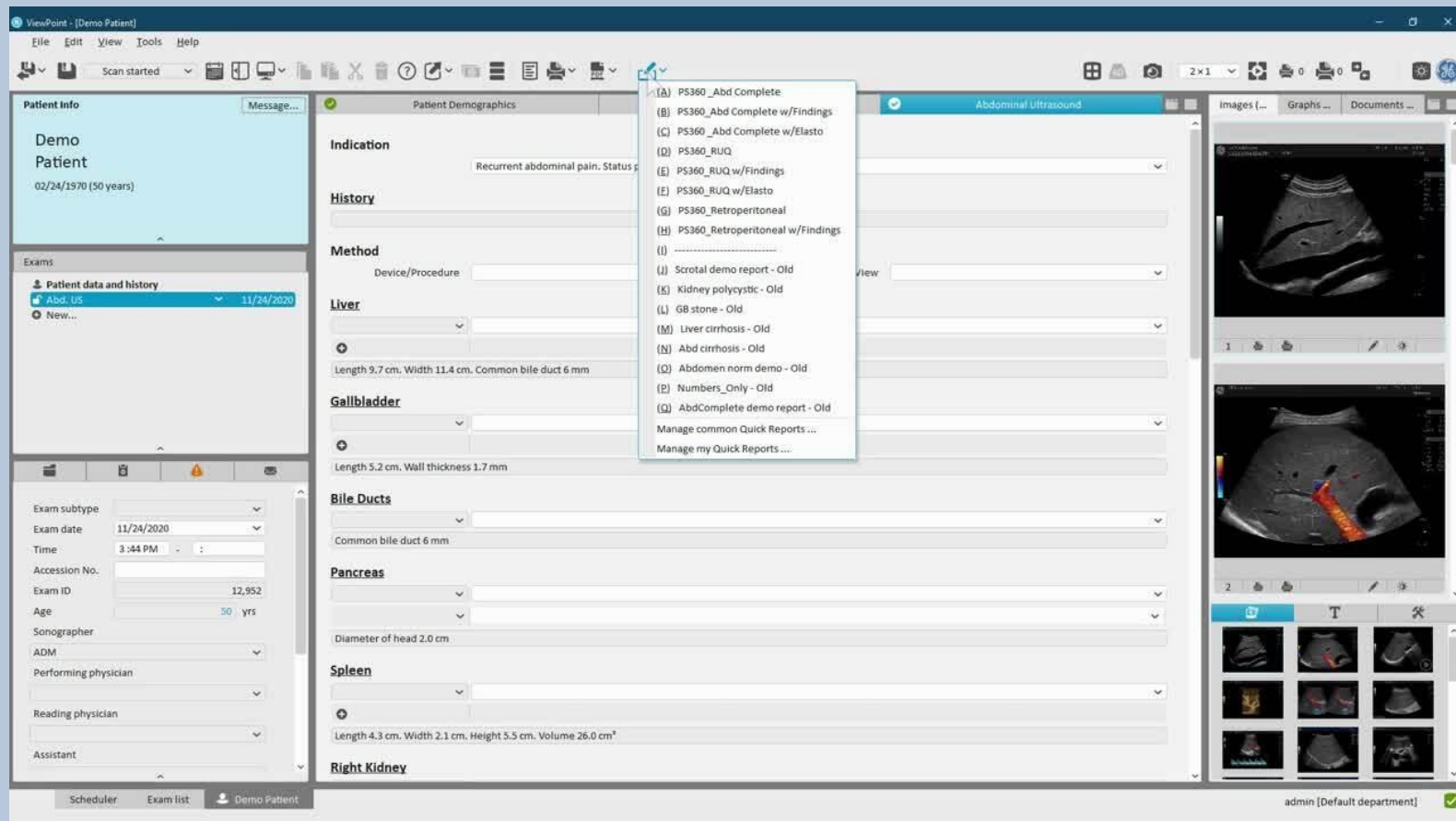
Resolved: dd/mm/yyyy

Notes: Notes

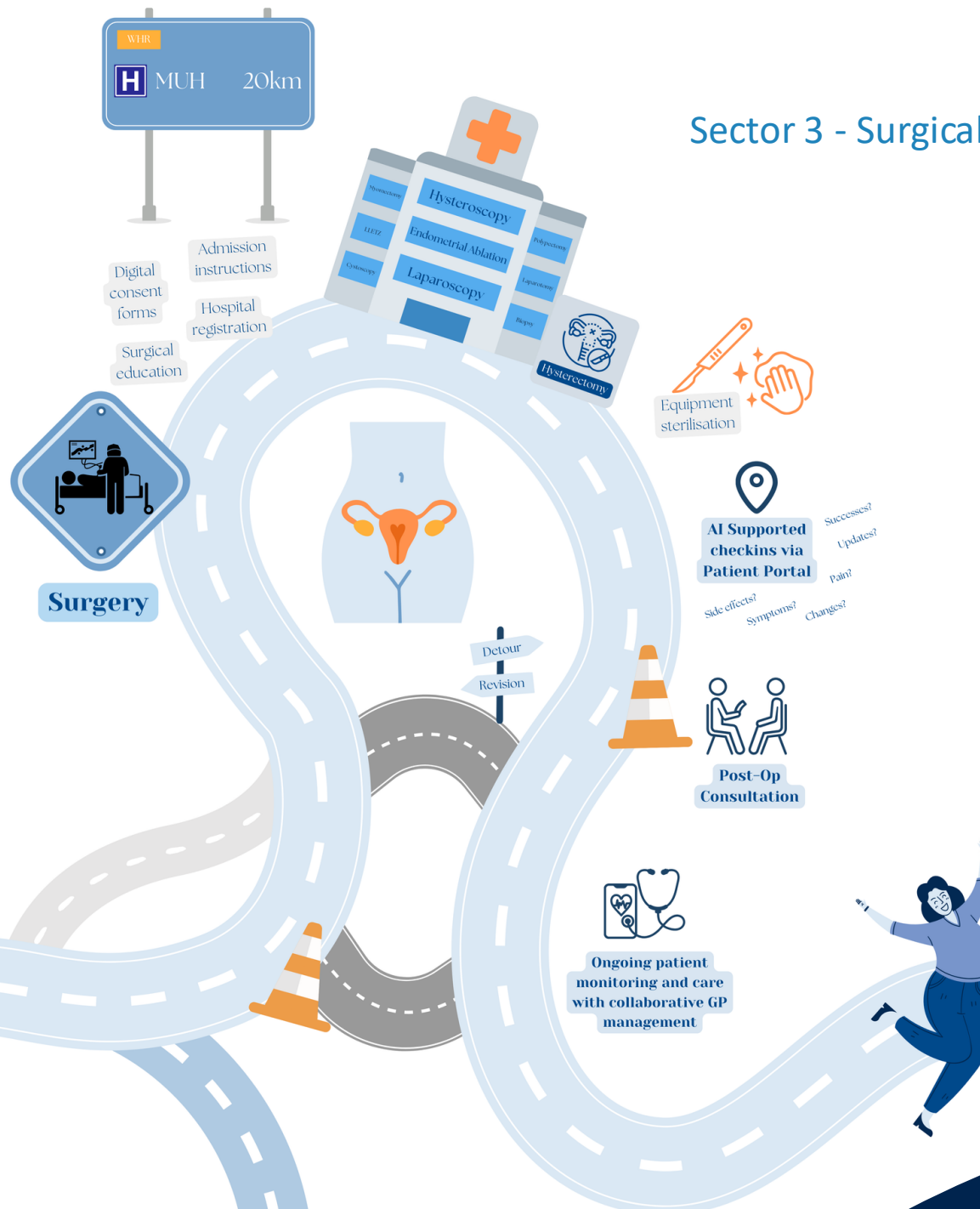
Sc	Source display	Target code	Target display
1	1. Polyps (AUB-P) - Endometrial or endocervical polyps.	16754591000119108	Abnormal uterine bleeding due to endocervical polyp (disorder)
1	1. Polyps (AUB-P) - Endometrial or endocervical polyps.	16755191000119103	Abnormal uterine bleeding due to endometrial polyp (disorder)
2	Endometrial polyp	1237359009	Polyp of endometrium (disorder)
3	endocervical polyp	8220004	Endocervical polyp (disorder)
4	Abnormal uterine bleeding	44991000119100	Abnormal uterine bleeding (disorder)
5	Prolonged menstruation		
6	History of AUB		
7	Amenorrhoea	14302001	Amenorrhoea (finding)
8	Infrequent menstruation	52073004	Oligomenorrhoea (finding)
8	Infrequent menstruation	386704007	Light and infrequent menstruation (finding)
9	Irregular menstruation	80182007	Irregular periods (finding)
10	Light flow menstruation	64206003	Hypomenorrhoea (finding)
11	Normal flow menstruation	282027006	Normal period (finding)
12	Heavy flow menstruation	386692008	Menorrhagia (finding)
13	Heavy gushes of menstrual flow		
14	Heavy clots during menstrual flow		
15	Intermenstrual bleeding	237130006	Bleeding between periods (finding)
16	early cycle intermenstrual bleeding		
17	Mid cycle intermenstrual bleeding		
18	Late cycle intermenstrual bleeding		

Robyn Richards, Terminologist, CSIRO

sector 2 Improvement: integrated ultrasound reporting and sanitation tracking



Sector 3 - Surgical Management



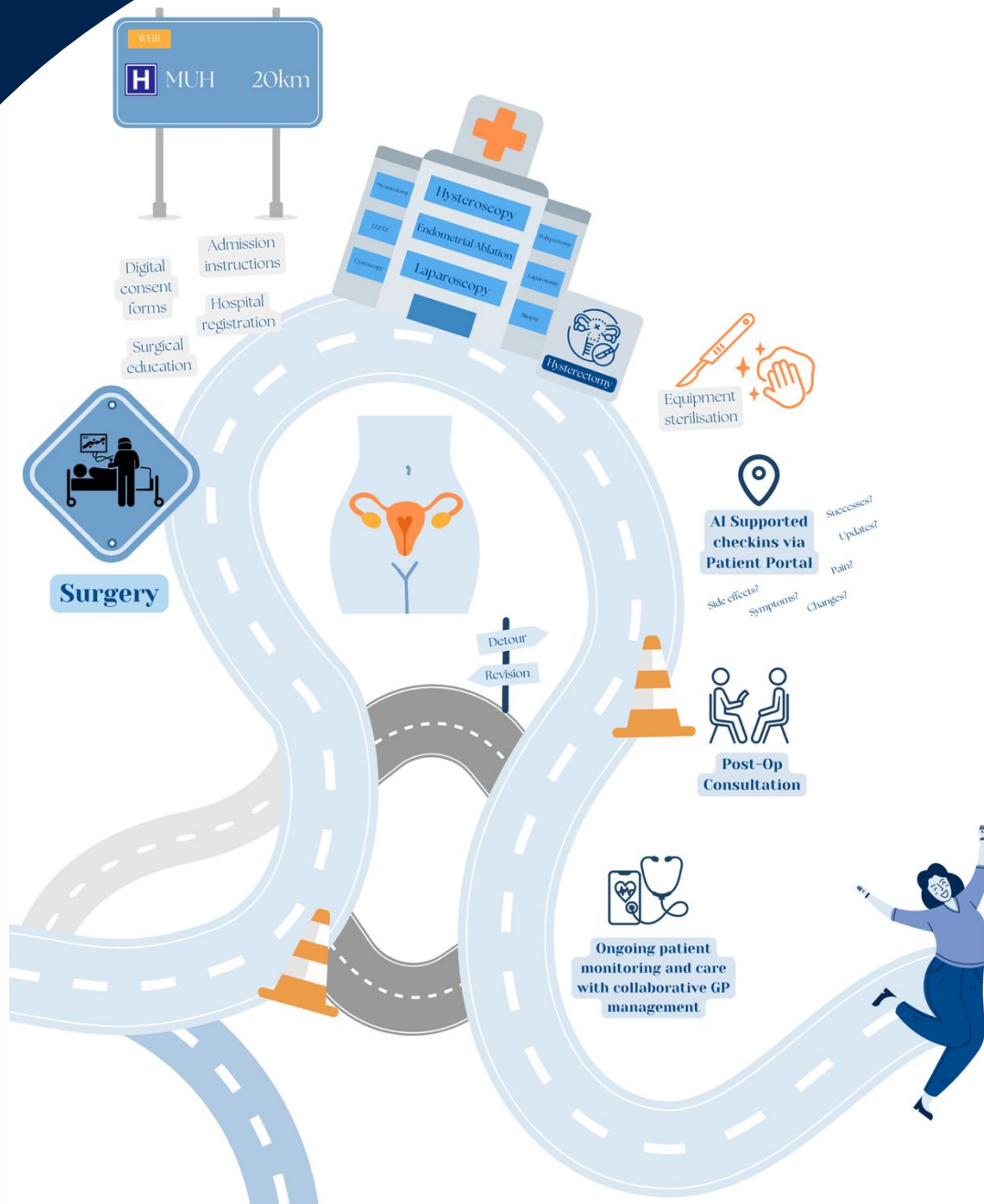
Sector 3 - Surgical Management

successes

1. EMR-integrated AI Scribe templates for theatre reports and MBS billing

improvements

1. Digital Smart Form surgical consent
2. Clinic-Hospital Integrated eReferral system
3. Integrated pre-admission and registration
4. Operation report creation with MBS integration and transmission optimisation
5. Automated pre- and post-operative patient information and communication pathway



sector 3 success:



EMR-integrated AI scribe templates for theatre reports

Edit template

SURGICAL - Hysteroscopy, IUD, Ablation, Biopsy etc.

I need help ?

Hysteroscopy (if applicable):

- Visualisation/View: [e.g. clear visualisation of uterine cavity, instruments used]
- Comments/Abnormalities: [e.g. endometrial lining normal, polyp present, fibroid noted]
- Endometrial lining: [e.g. thickened, atrophic, normal]
- Other procedures performed: [e.g. polypectomy, biopsy, myosure etc. and instruments used]
- Pathology/samples taken: [list of biopsies or specimens sent to pathology]

IUD Insertion Procedure (if performed)

- IUD type: [e.g. Mirena, Kyleena, Copper]
- Uterus position & visualisation: [e.g. anteverted, retroverted, good visualisation etc.]
- IUD insertion completion: Yes/No
- IUS position confirmed with ultrasound: [Yes/No]
- String length: [Cut to 3cm below external cervical os]

Novasure Endometrial Ablation (if performed)

- Vulvovaginal Region: [e.g. Normal, Atrophic]
- Pelvic Organ Prolapse: [e.g. Cystocele, Rectocele, Uterine Prolapse]
- Hysteroscopy Findings: [e.g. Good view, Cornu x2, benign endometrial lining, polyp noted]
- Novasure Endometrial Ablation Details:
 - o Uterus Dimensions: [Width, Length]
 - o Endometrial Coverage: [Full coverage, EBL <10mls]
 - o Post-Ablation Hysteroscopy: [Performed again, confirming adequate coverage]]

MBS Numbers: (List applicable MBS items for the procedure) [35500 (Gynaecological Examination under Anaesthesia), 35509 (Hymenectomy), 35630 (hysteroscopy with endometrial biopsy, if no ablation or polypectomy), 35503 (additional if IUD inserted), 35506 (IUD removal under anaesthesia but no hysteroscopy performed), 35616 (for Novasure endometrial ablation and associated hysteroscopy), 35633 (hysteroscopy with IUD removal, polypectomy) + 35620 (endometrial biopsy when 35633), 35614 (Colposcopy/Vulvoscopy), 35615 (vulval biopsy), 35608 (cervical biopsy), 35647 (LETZ of cervix), 35636 + 35620 (Hysteroscopy, resection of myoma or myoma and uterine septum + endometrial biopsy)]

Visibility Team Type Note

Make default

Delete template Save for Later

29/01/2025 Macquarie University Hospital

Wednesday, January 29, 2025 6:10:06 PM Dr M Talat Uppal

Primary Surgeon: Dr Talat Uppal
Anaesthesia type: General anaesthesia

Preoperative Diagnoses: Heavy menstrual bleeding, iron deficiency

Procedure Performed:

- Hysteroscopy
- Polypectomy
- Myomectomy
- Endometrial biopsy
- Curettage
- IV iron infusion

Operative Findings:

- Mild uterine descent
- Bulky cervix with ectropion
- Multiple polyps
- Small fibroid
- EBL <20mls

Hysteroscopy:

- Visualisation/View: Good view of uterine cavity
- Comments/Abnormalities: Multiple polyps, small fibroid identified
- Other procedures performed: MyoSure Lite for polyp and fibroid removal, curettage
- Single 3/0 suture applied to anterior cervix for haemostasis from tenaculum site

Pre-procedure Investigations:

- Ferritin: 20
- Haemoglobin: 138
- T saturation: 30.4%
- IV iron infusion administered

MBS Numbers: 35633, 35636

Postoperative care:

- For discharge today if well
- NSAIDs for 48 hours

Follow-up Plan:

- Review in WHR in 4 weeks
- Histopathology results to be communicated via text if unremarkable
- Face-to-face review if results concerning
- Fertility preservation discussed
- Declined Mirena IUD for HMB
- Declined endometrial ablation for HMB

sector 3 improvement:

Macquarie University Hospital integration in patient pathway



A key partner in healthcare, education, and research. WHR and MUH are working to research and develop smoother digital interoperability for the surgical sector of HMB patient pathway.

Interoperability objectives

1. Streamline administrative processes
2. Reduce manual documentation time
3. Enhance patient education delivery
4. Improve clinical workflow efficiency
5. Enable seamless integration between WHR digital ecosystem and MUH EMR

*Working with Abraham Bisseh,
Chief Technology Officer at MUH, to
develop this project*

Key components

- Pre-admission consent and registration digitalisation
- eConsent system with MBS integration
- Integrated eReferral system
- Operation report creation and transmission optimisation
- Transparent pre- and post-operative patient information and communication

conclusion

Through the development and standardisation of a Heavy Menstrual Bleeding management pathway and related resources we can work together to:

- ✓ Empower Australian women through digitally-led, equitable, high-quality HMB care
- ✓ Set a global standard for addressing menstrual health with compassion and innovation

Women's Health Road stands ready to collaborate with our partners in leading this transformation



Date: January 28, 2025
Reference: FHIR DevDays 2025
Subject: Invitation to speak

Dear Dr Talat Uppal,

We are pleased to invite you as a keynote speaker to the next edition of FHIR DevDays in Amsterdam, June 3-6, 2025.

FHIR DevDays is the largest FHIR-only event in the world and it attracts FHIR developers, FHIR implementers, and policymakers from all over the world. While FHIR and technology are the key topics of the conference, we always aim to bridge our technical reality to real use cases in healthcare.

We would love you to increase the awareness of our audience for female healthcare issues, share your clinician's view on the importance of the topic, and indicate how technology can help to improve. The important work that you are doing related to Heavy Menstrual Bleeding is the perfect use case that demonstrates all of the above.

Besides your keynote talk, we will host a 90-minute Let's Build session in which FHIR developers will collaborate on your Heavy Menstrual Bleeding use case. Having you join our conference will significantly improve the quality of this session. The output of this session will be a valuable ingredient for the broader HMB project, it will highlight how technology should be used. It will shed light on the areas in which technology and the FHIR specification are still lacking (if any) and it will provide you with tangible FHIR output to use in the HMB use case.

We are looking forward to a positive response.

Kind regards, Martine

Berden
Chief Marketing Officer



Questions? Thank you!

Dr Talat Uppal

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VMO Hornsby Ku-ring-Gai Hospital
RANZCOG Media Spokesperson
Clinical Senior Lecturer, Macquarie University
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Sarah Yeomans

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www.womenshealthroad.com.au



Q & A

The background is a solid dark gray or black. It is decorated with several light gray, rounded rectangular shapes of various sizes and orientations, scattered across the frame. The text "Thank you to our speakers!" is centered in the lower half of the image in a white, sans-serif font.

Thank you to our speakers!

Upcoming Events 2025

Feb 25

- **18th** – Sparked Leadership Evening (Adelaide)
- **19th** – Sparked CDG F2F (Adelaide)
- **20th** – Sparked TDG F2F (Adelaide)

Mar 25

- **18th – 20th** – Trans-Tasman Symposium & HL7 Au FHIR Connectathon (Sydney)
- **27th** – Sparked Webinar



Apr 25

- **16th** – Sparked CDG (Online)



Register for Sparked

Thank you!

Recording available in the coming days. Please email Sparked@csiro.au with any future webinar requests.