2022-2023 RESEARCH TRANSLATION & IMPACT REPORT

Better Care, Better Equity, Better Health









MONASH CENTRE FOR HEALTH RESEARCH AND IMPLEMENTATION (MCHRI)

Monash University, in partnership with Monash Health

Academic website: monash.edu/medicine/sphpm/mchri Community website: mchri.org.au

Faculty of Medicine Nursing and Health Sciences (FMNHS)

Vision

Better Care, Better Equity, Better Health



Director: Professor Helena Teede

Mission

To deliver health impact by partnering with community, clinicians and researchers to cocreate knowledge, and use implementation to drive equitable, quality healthcare and public health.

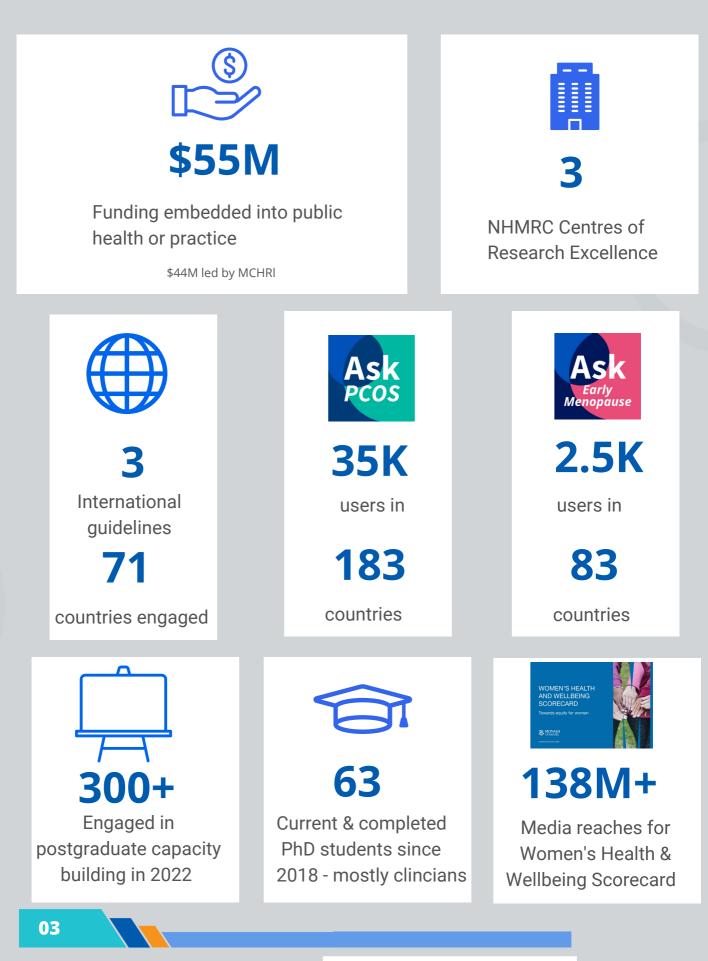
Partners/affiliations



Disciplines

Obstetrics, Paediatrics, Endocrinology, General Medicine, Emergency Medicine, Midwifery, Nursing, Dietetics, Psychology, Exercise physiology, Health Promotion, Biostatistics, Implementation Ccience, Health Economics. Data Management, Evidence synthesis and guidelines, Scientists, Public health, Health care improvement

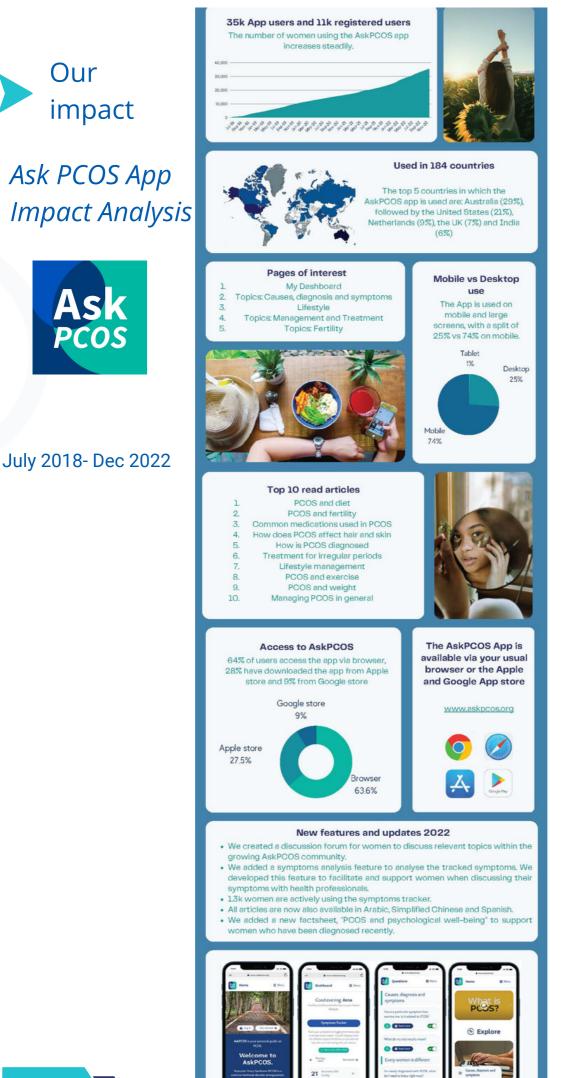
Our impact



Better Care, Better Equity, Better Health



- Enhancing knowledge and improved health focussing on all National Women's Health Strategy priority areas and enabling the delivery of the National Preventive Health Strategy.
- Delivering broader system level transformation through an embedded Learning Health System that is accountable to community priorities and drives and iteratively improves evidence-based, equitable public health and healthcare, aligned to, evaluating, and supporting the implementation of national strategies and policies.
- Supporting the provision of **efficient**, **high-value public health and health care**, **to ensure outcomes are maximised per dollar spent**, and curtailing unsustainable increases in healthcare expenditure.
- Optimising routine care for pregnant women and supporting decisions by patients, doctors, and health policymakers, by advancing the field of risk prediction using routinely collected health data.
- Reducing entrenched inequalities in women's economic wellbeing through promotion of greater equity in labour force participation, income and wealth accumulation.
- Building women's capacity, capability and leadership in research and translation in women's health.
- **Empowering our community** to drive and co-develop research and healthcare improvement, through training, support and broader national activities.
- Recognised as world leaders in women's health and public health.
- Adopting a Living Lab focus with a range of digital health apps and resources-See Appendix 2 for a list of digital apps and resources.







Let's talk about PCOS webinar

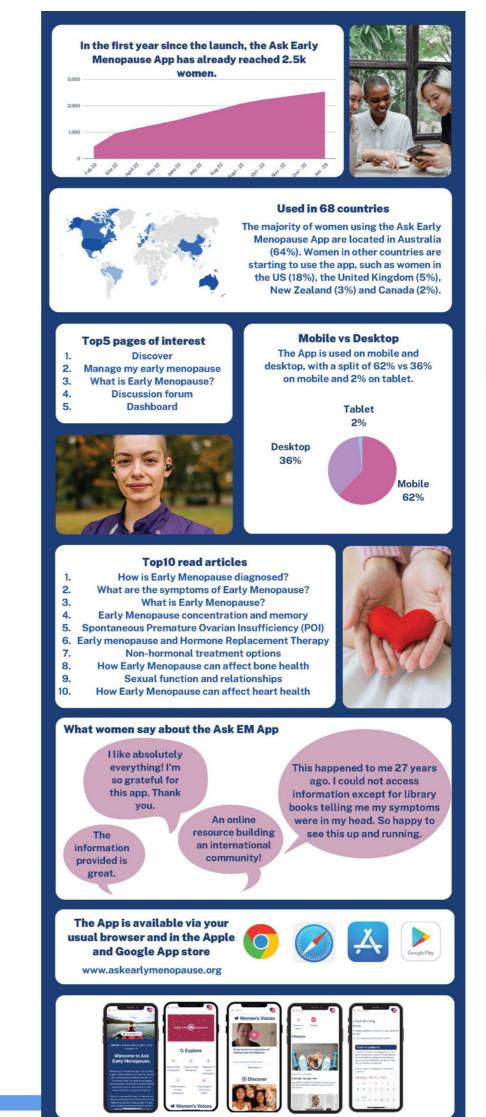
Interactive webinar with keynote speakers and Q&A session



Ask Early Menopause App Impact Analysis

1 Feb 2022 (Launch) to 31 January 2023







\$55 Million in competitive grant income (national and international)

\$44 Million of major grants led by MCHRI. \$11 Million shared with MCHRI.

Multiple grants including a pending NHMRC Centre of Research Excellence in healthy pregnancy

MCHRI hosts a \$5 Million <u>National Women's Health, Research, Translation and Impact</u> <u>Network.</u>

Just announced - \$1M MRFF Consumer and Community Involvement Project **UNDER EMBARGO**- \$1.5M NHMRC partnership grant for gender equity

MCHRI is the only group nationally to host three NHMRC Centres of Research Excellence, all integrated with Monash Health clinical services and staff.

See Appendix 1 - MCHRI Grants 2018-2022

Research Program

KPI - To attract new academic leadership with independent funding and skilled staff to support Centre clinical research platform, within 10 years post establishment of Centre

Outcome

MCHRI has expanded its leadership to include expertise in

- Translation
- Health Economics
- Data analytics
- Risk prediction
- Communication
- Education
- Biostatistics
- Implementation Science

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KPI - At level commensurate for each academic to meet university KPI's. In accordance with University Matrix (UM)

Outcomes

Academic leaders meet and exceed publication metrics.

Individual publications from MCHRI leaders are outlined on Monash University research profiles or Google Scholar and on MCHRI's website. All academics meet and exceed performance metrics with applications for level E,D&C demonstrating this.

Student & PhD program

KPI - Increase number of PhD students and expand PhD program

Outcomes

Our PhD program has expanded and number of students have increased in last 5 years as research program and expertise expands. Many are embedded in healthcare at Monash Health.

Current & completed PhD students - 63

Completed PhD since 2018 - 29





KPI - Partnerships/affiliations within 10 years post establishment of Centre to include: 15 key national and 3 international cross sectoral collaborations (policy makers, consumer advocacy groups, health care organisations, other academic organisations, NGO's etc),

Outcomes

- National Women's Health, Research, Translation and Impact Network (WHRTN \$5M)
- 3 three NHMRC Centres of Research Excellence
- Over 15 multinstitutional Agreements with over 100 partners.
- Monash Health Partnerships inlcuding paediatric, neonatal, obstetrics and midwifery, ED, cardiovascular, endocrinology, diabetes
- 3 international partnerships in infertility guidelines. National and international societies engaged in the PCOS CRE network across 71 countries.
- National Association of Diabetes Centres 120 Centres engaged
- PCOS, early menopause, infertility International guidelines (44 societies), National positions statements (across 4 societies), invited lead on the US Endocrine Society guideline task force
- Consumer Groups partnerships: including NBCF,BNCA, Verity, Daisy,Diabetes Australia, PCOS Challenge.
- Industry partnerships: Medibank, Australian Super
- Formal Collaborations: University of Birmingham, & WHO Collaborating centre (joint grants/publications),Warwick University UK (joint grants/publications), Glasgow University. (joint grants/publications)





KPI - Number of MCHRI-led education courses - online and in person. Aim to Increase frequency and develop new courses.

Outcomes

Despite COVID limitations we have exceeded the number of courses offered in previous years and each year increasing the number of courses offered including Women in Leadership which has significantly expanded and has an excellent reputation.

Women in Leadership Program

x12 as part of joint MH and MCHRI initiative to advance women in leadership – offering 7 courses in 2023

<u>Masterclass in Implementation Science and Effective Healthcare Improvement in Practice</u> – 6 and 3 courses offered in 2023.

<u>Implementing Improvement in Healthcare Program</u> – 12 months teaching and coaching. With Monash Partner – second year running due to popularity.

<u>An evidence-based approach to the assessment and management of Polycystic Ovary Syndrome</u> – 3 Offered at the end of 2023 - being updated with new guidelines.

An evidence-based approach to the assessment and management of Early Menopause – offered end of 2023







MCHRI is a key partnership between Monash Health and Monash University, and our people span a variety of professions, with many holding clinical roles, and bring a wide range of expertise. Meet some of our key researchers and clincians.

Professor Helena Teede Director, Monash Centre for Health Research & Implementation (MCHRI)

Prof Teede is Director of MCHRI, a professor in women's health, an endocrinologist & no. 1 expert in the world for PCOS. A/Prof Lisa Moran Lead, Healthy Lifestyle Research Program Co-Lead, Risk Prediction Program

A/Prof Moran works in clinical, epidemiological & implementation nutrition research & clinical dietetics.



A/Prof Vincent is an expert in early menopause, an endocrinologist & led the development of the Ask Early Menopause App. Dr Joanne Enticott Lead, Big Data & The Learning Health System

Dr Enticott is a biostatistician whose research is informing policy to support equitable & effective health services.

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Dr Garad is an expert in system level implementation & heads up MCHRI's education program.



Dr Harrison leads the translation of healthy lifestyle programs at scale for public health impact.



Dr Joham is an endocrinologtist, PCOS researcher & established the first Victorian mulitdisciplinary PCOS clinic.

Lead, Gestational Diabetes/Diabetes Lead, Biomarker Discovery Program & Biobanking Platform

Dr Aya Mo<mark>usa</mark>

Dr Mousa is researching women's cardiometabolic health including diabetes & gestational diabetes.





KPI - to increase media, PR and community, cross sectoral engagement activities and events (e.g. conferences/ seminar, press releases, public lectures)

Outcomes

Exceeded media targets.

• Now the primary contact/source for ABC in Women's Health and Equity

Stories in The Guardian, Women's Agenda, ABC, Monash University Lens

Recent examples of media releases and Monash University Lens articles

- Australian women suffering high levels of mental distress due to financial insecurity *Frontiers in Psychiatry*
- New Learning Health System Framework for the health sector to transform care in COVID and beyond *Frontiers in Medicine*
- New evidence shows the importance of healthy lifestyle programs in pregnancy *JAMA Internal Medicine*
- Decades of research on advancing women in leadership shows that effective strategies can drive change *The Lancet's EClincial Medicine*
- Mental health scare: Women falling through the cracks
- The subtle art and science of COVID vaccine (and booster) influencing



WOMEN'S HEALTH AND WELLBEING SCORECARD

Towards equity for women

MONASH University



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In 2021 launched two national networks

- Australian Women in Healthcare Leadership (AWHL - \$2M) and

The Women's Health and Research Translation and Impact Network (WHRTN \$5M).

2022

Launched annual **Women's Health and Wellbeing Scorecard**. Over 134M media reaches

Media metrics:

·<u>ABC news interview</u>

<u>The Guardian</u> - Reach: 93.6M, Desktop Reach 25.3M, Mobile Reach 68.3M
 <u>News.com.au</u> - Reach: 15.3M, Desktop Reach 3.48M, Mobile Reach 11.8M
 <u>ABC Online</u> - Reach: 15.2M, Desktop Reach 4.51M, Mobile Reach 10.7M
 <u>Channel 9 News</u> - Reach: 6.42M, Desktop Reach 1.43M, Mobile Reach 4.98M
 <u>The Herald Sun</u> - Reach: 3.08M, Desktop Reach 780k, Mobile Reach 2.29M
 <u>Yahoo News UK</u> - Reach: 2.68M, Desktop Reach 896k, Mobile Reach 1.79M
 <u>The Daily Telegraph</u> - Reach: 2.61M, Desktop Reach 555k, Mobile Reach 2.05

Launched MCHRI's community translation website with digital health apps and tools, risk calculators, implementation tools – <u>mchri.org.au.</u>

Ask PCOS App impact report
PCOS Program impact report
Ask Early Menopause impact report.

Number of online community events/webinars exceeded including events on:

PCOS awareness
 Lifestyle and pregnancy
 Healthcare improvement
 Implementation science
 Early Menopause App launch for International Women's Day 2022
 Launch of Healthtalk Australia Infertility & Fertility Treatment Experiences Resource





We work through partnerships, especially with our community, using codesign research, implementation, training, and healthcare improvement to recognise and address the social determinants of disease and to create an equitable and healthier future for Australian women.

The next three years brings a strong commitment to prevention and wellbeing, and to equity, access, diversity and inclusion. It brings clearly specified strategic goals and outcomes to deliver impact for Australian women.

Over the next three years, MCHRI will deliver health impact by:

Leading research excellence to deliver better health and equity for Australian women

- ·Working collaboratively to lead and grow international and national partnerships
- ·Increasing diversity in the workforce
- ·Providing unparalleled research and cross-cutting platforms
- ·Workforce development, capacity building, and training

•Informing our priorities to advance policy, guideline development, and deliver translation into practice.

MCHRI active grants 2017-26

Major Grants with key Translation outputs mostly led by MCHRI or MCHRI CI with lead role in translation	Outputs	Funding- rounded off to closest \$50k
NHF Fellowship	Lifestyle digital tools, risk calculator and resources	\$600k *
NHMRC Fellowship	Health economic tools, National health scorecard	\$400k *
NHMRC Fellowship	IPD tools and outputs	\$350k *
NHMRC L3 Fellowship	Risk prediction tools, algorithms, apps, implementation toolkit, policy toolkit, health economic resources, lifestyle tools/resources, apps, patient experience tools, guidelines, health professionals resources, consumer resources	\$1.8M *
NHMRC CRE in PCOS	PCOS app, PCOS guidelines, health professional resources, consumer resources	\$2.5M *
NHMRC Practitioner Fellowship	Practitioner Fellowship	\$450K
Medibank Optimal Me Study and other partner grant tools –	Pregnancy and lifestyle tools	\$500k *
MRFF First 2000 Days - 2019	Risk prediction tools, algorithms, apps, implementation toolkit, policy toolkit, health economic resources	\$1.0M *
MRFF first 2000 days 2020	0 days 2020 Risk prediction tools, algorithms, apps, implementation toolkit, policy toolkit, health economic resources, lifestyle tools/resources, early menopause app, patient experience, guidelines, , Infertility health talk guidelines, PCOS app, PCOS guidelines, health professionals resources, consumer resources, algorithms.	
NHMRC P/Ship Early Menopause	Early menopause app, patient experience, early menopause guidelines.	\$2M *
NHMRC P/Ship PCOS (2015-20)	AskPCOS app, patient experience tools , clinical tools	\$2M *
NHMRC P/ Ship Good4Mums	Quality Improvement tools, Implementation toolkit	\$2M *
NHMRC P/ship AWHL	Implementation tool kit for advancing gender equity, evaluation tool kit, data framework	\$2.4M *

Appendix 1





NHMRC Centre for Research Excellence (CRE) WHiRL	Early menopause app, early menopause guidelines, Infertility health talk guidelines, PCOS app, PCOS guidelines, health professional resources, consumer resources	
NHMRC CRE Healthy preconception and pregnancy – Co-lead Teede	Implementation toolkit, HP resources, consumer resources, algorithms, risk prediction toll, guidelines.	
Heart Foundation/MRFF Moran	Healthy lifestyle digital tools, risk calculators	
MRFF Women's Health Research and Translation Network / MRFF Teede	Includes a National consumer network and ECR network with relevant tools to facilitate these	
MRFF /Data and improvement Teede	Artificial intelligence and data tools	
MRFF First 2000 Days digital health Harrison	Innovative Digital tools is primary grant output	
NHMRC international EU matched implementation RCT - Teede NHMRC	Implementation multinational project on healthy lifestyle programs – app, implementation toolkit, resources	
MRFF No wrong door		\$1.8M
MRFF Consumer and Community Engagement		\$1M
Subtotal MCHRI led Translation grants with tools as outputs of a broader grant		\$34M *
NHMRC P/ ship MAGDA	Diabetes risk prediction tools	
GACD Implementation RCT	Risk prediction tool, implementation toolkit	\$1.4M
MRFF DELIVER Project – Learning Health Systems Cl Enticott	LHS resources and tools	\$9.3M
MRFF Preterm babies Teede, Enticott Cis	Risk prediction and implementation tools	\$1.8 M
Subtotal of grants where MCHRI leads in Translation / produces tools & outputs		\$21.5M
Overall total grants with Translation tools / outputs		\$55 M

*MCHRI-led grants

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MCHRI'S INTERACTIVE DIGITAL HEALTH TOOLS

Appendix 2

Tool name	Funding body	Purpose	Target audience
Ask PCOSAskpcos.org	MRFF/ NHMRC /CRE	Helps women with polycystic ovary syndrome (PCOS) find information of the highest quality from leading experts to help them learn about the condition and support them with tools including a personal dashboard to help track symptoms, find the healthiest possible lifestyle and decide on the best management options. Being extended to include a self care and shared decision making tool.	Women with polycystic ovary syndrome, health professionals.Reach: Worldwide.Estimated audience: 50K
Ask Early MenopauseAskearlym enopause.org	MRFF/ NHMRC/ CRE	Helps women with early menopause find trustworthy information of the highest quality from leading experts to help them learn about the condition and support them with tools including a personal dashboard to help track symptoms, find the healthiest possible lifestyle and decide on the best management options. Being extended to include a self care and shared decision making tool.	Women with early menopause (could include women having cancer treatment) , health professionals.Reach: Worldwide.Estimated audience: currently 25k aiming for 50k
Ask InfertilityIn development	MRFF/ NHMRC/ CRE	Helps women with infertility find information of the highest quality from leading experts and create. Includes a self care and shared decision making tool.	Women with infertility, health professionals.Reach: Worldwide.Estimated audience: 15k
Healthy pregnancy /Optimal Mewww.optimalme.or g/ Developed and in use	MRFF / Mediban k	Helps women find accurate and trustworthy information that may help them optimise their health during pregnancy.	Women in preconception, pregnancy and postpartum, health professionals and women Reach: Worldwide.Estimated audience: 100k
Ask healthy pregnancy Healthy LifestylePrototype developed / user testing	MRFF	Helps women find accurate and trustworthy information that helps them optimise a healthy lifestyle.	Women in preconception, pregnancy and postpartum, health professionals. Reach: Worldwide.Estimated audience: 50K
Ask heart healthin development	MRFF	Helps women understand risk factors and find accurate and trustworthy information to reduce heart disease.	Women in preconception, pregnancy and postpartum, health professionals. Reach: Worldwide.Estimated audience: 20k
Personal GDMpersonalgdm.co m	MRFF	Evidence-based tool designed to be used by health professionals and pregnant women affected by gestational diabetes and their health-care providers.	Women with GDM, health professionals.Reach: Worldwide.Estimated audience: 25k
Ask diabetesPrototype developed	MIME / MRFF	Evidence- based tool to enable community members to optimise diabetes self management and care	Consumers with diabetes50k



MCHRI'S RISK TOOLS

Appendix 2

Tool name	Funding body	Purpose	Target audience
Personal GDM pregnancy risksoutcomes.personalgd m.com	MRFF	Risk calculator to determine the risk of an adverse pregnancy outcome if women have gestational diabetes.	Health professionals.Reach: Australia.Estimated audience: 10K
Personal GDMhttps://lifestyle.perso nalgdm.co m	MRFF	Risk calculator to determine if women are at higher risk of developing gestational diabetes during pregnancy.	Health professionals and pregnant women.Reach: Worldwide.Estimated audience: 50K
Cardiometabolic risk in pregnancyln development	MRFF	Risk calculator to determine if women are at higher cardiometabolic risk during pregnancy.	Health professionals and pregnant women.Reach: Worldwide.Estimated audience: 20k
Type II diabetes after pregnancyIn development	NHMRC partnershi p grant	Risk calculator to determine if women are at risk of type II diabetes after pregnancy.	Health professionals and postpartum women.Reach: Worldwide.Estimated audience: 50K
Pre/ Eclampsia Risk Predictor CalculatorIn development	MRFF	Risk calculator to determine if women are at risk of eclampsia	Health professionals and pregnant women.Reach: Worldwide.Estimated audience: 15k



MCHRI'S IMPLEMENTATION TOOLS

Appendix 2

Tool name	Funding body	Purpose	Target audience
Implementation Toolkit (In development)	Multiple MRFF	Support clinicians, hospitals and health services to prepare and implement system change by providing guidance in the planning stage with a readiness assessment and recommendations to achieve readiness and by providing an interactive step-by-step guide to preparing and implementing change including customised recommendations and an implementation tool for milestone planning and tracking of status and progress.	Hospital administrators, health professionals Reach: Australia. Estimated audience: TBA
Learning Health System toolkit	Resources and guidance around the LHS – interactive and linked to short courses and accredited masters outputs		

ORGANISATIONAL CHANGE TOOLKITS

Tool name	Funding body	Purpose	Target audience
Women In HealthCare Leadership Organisational Change ToolKit. In development at www.womeninhe althleadership.org	NHMRC	Toolkit for organisations to implement change that improve career progression for women	Healthcare organisations, other organisations, policy makers.Reach: Worldwide.Estimat ed audience: 1000



INTERACTIVE TOOLS

Appendix 2

Tool name	Funding body	Purpose	Target audience
Interactive health service performance pageIn development	MRFF	Calculator to Identify the outcomes and costs of health services. Interactive functionality for display data	Health Professionals, government.Reach: Australia.Estimated audience: 10K
Shared decision making - PCOS- Early menopause- Infertility- Diabetes- Healthy pregnancyIn development	MRFF/CRE / NHMRC	Help women make decisions about PCOS, early menopause and infertility.	Women and health professionals.Reach: Worldwide.Estimated audience: 150K
Question prompt listPCOS- Early menopause- Infertility- Diabetes- Healthy pregnancy	NHMRC	Guide informed shared decision making	Women
Gestational weight gain calculator	MRFF	Complex dynamic tool for personalised medicine	Women and Health Professionals

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