Objectives of the Women & Heart Disease Forum

- To bring together experts from across health and medical disciplines with a common interest in women’s heart health.
- To identify priorities for future research and action.
- To provide a gender perspective in addressing heart disease in Australia.
- To showcase the latest Australian research and public health approaches addressing heart disease in women.
- To identify priorities for future research and action.
- To provide a gender perspective in addressing heart disease in Australia.

This report provides a brief account of the inaugural multidisciplinary Women and Heart Disease Forum. You can also view the presentations here: http://www.webcasts.com.au/heartfoundation2017/

EXECUTIVE SUMMARY

- While heart disease has long been considered a condition that mostly affects men, it is also leading killer of Australian women. Recent advances in research highlight the significant gender and sex related influences on heart disease.
- On June 14 2017 the Heart Foundation NSW hosted experts in women’s health from diverse clinical backgrounds, including cardiology, obstetrics & gynaecology, midwifery, emergency medicine, nursing, oncology, general practice and community and public health.
- This multidisciplinary Forum for the first time described the landscape of women’s heart health from the perspectives of researchers, clinicians, community health professionals and the women themselves.
- The day included expert presentations on the status of heart disease among women in Australia and globally, along with recent research advances in areas including diagnosis and treatment, pregnancy, cardio-oncology and menopause.
- An important part of the day was the contribution of community organisations describing their work among women from regional & remote, Aboriginal and culturally and linguistically diverse communities. Issues of access to information and services, cultural relevance and appropriateness, and competing priorities were identified as challenges to be considered.
- Five heart health agencies presented on their work addressing these challenges and agreed that collaboration was important to achieve awareness and health outcome goals.
- The latest international and Australian research was reported including:
  - Emergency department triage, diagnosis and treatment
  - Bleeding risk
  - Cardiac rehabilitation issues for women
  - Hypertensive diseases of pregnancy and long-term risk
  - Management of cardiac disease in pregnancy
  - Menopause
  - Spontaneous coronary artery dissection

Attendees were surveyed on five priorities for action and they were

1. Advocacy for a federally funded national campaign to raise awareness of heart disease in women
2. Health system changes to better support women including a focus on pregnancy
3. Greater investment in specialist research specifically focussed on sex and gender related issues
4. Improvement in future clinical guidelines to ensure they address gender related issues
5. Health professional training including a review of relevant education to include gender related issues & strategies to enhance women’s participation in research and improve clinician’s diagnosis and management skills
Background

The Women and Heart Disease Forum was conducted as part of the Heart Foundation NSW Women and Heart Disease program.

This program, which commenced in 2015, has focused on:
- Awareness of heart disease among women
- Engagement with health professionals
- Advocacy & support for research into heart disease in women.

One of the early strategies implemented was the establishment of the **Hearts and Heels Cardiology Roundtable** chaired by A/Prof Lynne Pressley to provide an opportunity for female cardiologists to come together informally to explore the issue of heart disease in women. The Forum reported on here is one of the outcomes of this Roundtable.

The **Community Grants** strategy has been implemented to increase awareness among women. At the time of the Forum, 12 grants have been awarded to community based organisations across NSW to address the needs of women from regional, Aboriginal and culturally and linguistically diverse communities. Highlights from a number of these projects were shared with the audience and they continue to inform the work of the Women & Heart Disease Program in NSW.

**Women and Heart Disease research grants** of $150,000 have been offered to researchers in NSW in 2016 and 2017. The inaugural successful research recipient was Professor Elizabeth Sullivan. The focus of her work is the longitudinal study of first time mothers with heart disease to examine long-term health effects of pregnancy on heart disease progression in over 800 women. While it is recognised that the extra demands that pregnancy places on the body can result in immediate heart complications in some instances, the longer term implications of pregnancy complications and the inter-relationship with heart health is still little understood. The second grant recipient will be publicly announced in 2018.

**Making the Invisible Visible** is the annual awareness-raising campaign conducted in June. The campaign aims to raise awareness of heart disease as a leading killer of Australian women and to increase awareness of the warning signs of a heart attack. The campaign has paid particular attention to the sex and gender disparities evident in the research, diagnosis and management of heart disease.

With a focus on younger women, the campaign achieved the highest reach in Heart Foundation social media history in its first year.
A/Professor Lynne Pressley - Heart disease among Australian Women

To set the context, Associate Professor Lynne Pressley painted the picture of heart disease among Australian women:

“Women don’t have less heart disease; they just present 10 years later”. They have fewer investigations and interventions and they also have worse outcomes.

A/Prof Pressley presented the data and identified gaps in our understanding, recommending a way forward that focusses on:

(1) promoting women’s awareness,
(2) fostering relevant research;
(3) mentoring women in the fields of cardiology and research.

The Community Development Approach

The NSW Women & Heart Disease Program has invested in community awareness raising through its Community Grants Program. Session participants heard highlights from 10 of these initiatives involving women in regional NSW, Aboriginal women & women from culturally & linguistically diverse communities. Initiatives described included training of bilingual community educators in women’s heart health, engaging with champions in regional NSW and the creation of culturally appropriate and meaningful resources.

“Women decide not to go there [to the cardiologist] because it’s just too difficult …. Distance is a huge barrier for women.”

“It would be great if we could get a female cardiologist in Lismore; even a visiting one.”

Nerida Colley, Lismore Women’s Health and Resource Centre

“…when these women’s narratives were put at centre, our processes were put at centre, we could do things in a culturally appropriate way.”

Lou Glover, Awakened Media

“There are significant barriers with health literacy and socio-cultural barriers as to why physical activity is not part of their lives.”

Estela Giminez, Illawarra Local Health District
Heart Health Agency Panel - Working to improve women’s health

A number of agencies are engaged in improving women’s heart health in Australia. Each playing to their strengths in communication, public health, support and research. Five key agencies presented on their role:

**Julie Anne Mitchell, Heart Foundation**
“We felt there were unanswered questions so we started tracking women's attitudes and beliefs through a national population tracking survey called Heart Watch which continues to this day. This is shaping our direction.”

**Rebecca Dean, Heart Kids**
“Our babies are getting older …. They are approaching their 30s.”
“I now have two babies with holes in their hearts and I don’t know what that means.”

**Dr Linda Worrall-Carter, Her Heart:**
“The biggest increase in heart disease risk is in the age group 25-40 years and of course this group is all on social media.”
“One of our mantras is we are asking women to put themselves first.”

**A/Prof Sanjay Patel, HRI**
“The HRI encompasses important clinical questions, it answers fundamental basic science questions and it also seeks to improve the profile of our women researchers.”

**Georgi Glover, Victor Chang CRI**
“For women, it’s not that easy [to treat] …. We need to get down to the molecular level to find out what on earth is going on.”

**Keynote presentation:**

**Professor Anushka Patel - Redefining Women’s Health in the Era of the Sustainable Development Goals**

Professor Anushka Patel presented on the current status of women’s heart health from the perspective of global health and well-being goals. Women’s health has for decades been interpreted as “maternal” health with goals largely related to sexual and reproductive health.

“The current agenda, with its primary focus on sexual and reproductive health limits the opportunities to improve the health of the maximum number of women in the most effective ways possible and discriminates against and excludes those women who do not have children and women who are no longer of reproductive age.”

Professor Patel called for a redefinition of women’s health, taking a life course approach to women’s health and taking a gendered approach to understanding data.

“Assumptions that data and research findings only involving men are relevant for both men and women are not only discriminatory but produce bad science and have the potential to lead to detrimental effects on the health of women.”
Professor Garry Jennings - Raising Women’s Awareness - The Australian Experience

Professor Garry Jennings described the progress made in raising awareness among women and engaging with health professionals and researchers in Australia over the last 10 years. During this time there has been a parallel increase in interest in gender equity and the role of sex and gender in diseases including cardiovascular disease.

He described the future of women’s heart health as promising, with:

- More agencies now committed and actively involved
- Interdisciplinary approaches bringing new insights
- “Joined up” thinking about the issue taking place both nationally and globally.

Professor Jennings also emphasized that coming together provides an opportunity to collaborate and lobby for more government recognition of heart disease in women, research funding and support for women in research and clinical leadership.

Option A - CHALLENGES IN THE MANAGEMENT OF CVD IN WOMEN

This session focused on the increasing evidence that there is increasing evidence describing gender and sex specific differences in the presentation and pathology of heart disease in women.

What we learned:

- Australian research demonstrates that women are triaged to lower levels of urgency in Emergency Departments.
- More understanding is needed of sex differences in symptoms, sex specific troponin cut points and investigative strategies for Acute Coronary Syndrome (ACS).
- Women presenting with ST-Elevation Myocardial Infarction (STEMI) are at increased risk of complications, especially bleeding complications, in hospital and long term.
- Australian and international literature regularly reports that women are less likely to be referred to, attend or complete cardiac rehabilitation; and we know that attendance by women confers a significant mortality benefit.

Dr Jenny Yu: “Women comprise a high-risk group with worse outcomes for many procedures …. And yet women only account for 20-25% of patients enrolled in major cardiology trials …. Despite repeated calls for sufficient enrolment to allow for adequate power in these sub-group analyses.”

Option B - PREGNANCY - THE ULTIMATE STRESS TEST

Vascular complications in pregnancy are attracting more attention now, but there remains significant gaps in our understanding of aetiology, prevalence and evidence-based care. Improvements in understanding are critical to predict the outcome of the pregnancy, optimise outcomes for the foetus and predict future health of the mother.

What we learned:

- The prevalence of cardiac disease in pregnancy is poorly defined but probably affects 1-4% of all pregnancies in Australia. With the anticipated growth of the adult congenital heart disease population, the numbers are expected to rise.
- For some women with heart disease, pregnancy risks can be substantial – yet “under-contraception” appears common. Evidence-based information for these young women is essential from adolescence.
- Women with cardiac disease in pregnancy need preconception and pregnancy care which is seamless, woman centred, multidisciplinary and evidence-based.
- NSW research has reported 10x the rate of both severe maternal mortality and small-for-gestational-age infants as well as increased rates of maternal cardiovascular complications post birth in women with heart valve prostheses.

Professor Gemma Figtree: “We all know the traditional stress test of putting people on a treadmill…. As early as 16 weeks [of pregnancy] the cardiac output is increased by up to 50%.”
Option C - PRE-ECLAMPSIA

It is estimated that 30,000 women in Australia are diagnosed with pre-eclampsia or hypertensive disorders of pregnancy each year. Research in recent years has shown that rather than resolving post-partum, these women are at increased risk of cardiovascular disease post pregnancy.

What we learned:

• Hypertensive disorders of pregnancy [HDP] affect over 10% of pregnancies, with pre-eclampsia the most common condition at 5-7%.
• Data linkage using the NSW 45 and Up Study data found that women with HDP were 3.79 times more likely to develop hypertension; these women were nearly 10 years younger than women with hypertension who did not experience HDP.
• Women with HDP are also at increased risk of venous thromboembolism, diabetes, end stage renal disease and mental health disorders; outcomes for the children are poorly studied and the effect of antihypertensive treatment not known.
• Pregnancy is a stress test for the vascular system and unmasks latent vascular/endothelial dysfunction. Disorders of pregnancy [preeclampsia, eclampsia, gestational hypertension] inherently change the vascular system in predisposed women.
• Inflammatory biomarkers can sharpen cardiovascular risk assessment and are independent of traditional risk factors; they may better target patients who would benefit from intervention.

Dr Clare Arnott: “Pregnancy is an amazing opportunity for us because it enables us to identify women early and potentially modify their risk. It’s a powerful area to be working in”.

Option D - RESEARCH FRONTIERS

As understanding of the sex and gender specific aspects of heart disease grows, a number of new frontiers of research are emerging. Among these are the impact of cardiotoxicity on the cardiovascular health of women post breast cancer treatment, women’s experience of menopause including age of onset and symptoms, and Spontaneous Coronary Artery Dissection [SCAD] a condition largely affecting otherwise healthy and fit young women.

What we learned:

• Hot flush frequency may mark emerging vascular dysfunction among early midlife women.
• SCAD, which predominantly affects women, is underdiagnosed; however, it is the cause of 24% of all myocardial infarctions in women less than 50 years.
• In women with early breast cancer, especially over 65 years, cardiovascular disease is the predominant cause of mortality.
• Women with a history of breast cancer are at an increased risk of CVD compared to women without a history of breast cancer.

Professor Rod Baber: “Menopause is a critical time to intervene to delay the onset of CVD later in life”.
Facilitated Panel Discussion:
Gender and sex in media, research and cardiovascular health
Where are the gaps and what are the opportunities?

Chaired by: Sophie Scott

Panel Members:
Dr Kerry Chant, Chief Health Officer and Deputy Director-General, Population and Public Health, NSW Health
Dr Melina Georgousakis, Founder, Franklin Women
Professor Chris Semsarian AM, Professor of Medicine, University of Sydney, Cardiologist, Royal Prince Alfred Hospital, NHMRC Practitioner Fellow
Professor Elizabeth Sullivan, A/Deputy Vice Chancellor Research; Professor of Public Health UTS. Principle Investigator, AMOSS
Dr Adrienne O’Neil, Senior Research Fellow, Centre for Mental Health, Melbourne School of Population & Global Health
A/Professor Lynne Pressley AM, Interventional Cardiologist, Mater Hospital & Royal Prince Alfred Hospital, Clinical A/Professor of Medicine, University of Sydney

Sophie Scott, ABC National Medical Reporter, facilitated a lively discussion on sex and gender in research, medical training and the professions and the subsequent impact on women’s heart health. Here are some of the highlights from this discussion.

Where we have come from:
• Heart disease has historically been seen as a disease of men with women’s health initiatives often taking the “bikini approach”.
• While women were not in the workforce, the impact of heart disease was less obvious. This has changed with women’s greater participation in the workforce and economy.
• In the past if men presented with palpitations, their symptoms were treated more seriously than were women who were often labelled histrionic.
• Women have been slow to take up the messages about heart disease, but so have governments and health professionals.

How our understanding has evolved:
Death rates from heart disease began to fall for men and women from the 1960’s;
• but the rate of improvement was lower for women. More women were entering medicine, cardiology and research.
• There was greater awareness that most of the participants in the research informing practice were men.
• Then into the 1990’s we became more aware of the pathological differences between men and women. All of this has brought us to where we are today. It is just a pity it has taken so long!

Priority risk factors for women:
• Overweight and obesity are a public health priority. Rates have stabilised overall but women are making up a greater proportion of this population.
• While there have been great advances in maternal health and infant mortality rates, issues relating to gender inequality are important to consider as part of the broader social determinants of health.
Women and Heart Disease Forum Highlights

Actions we can take:

- Advocacy by organisations such as the Heart Foundation and by researchers and clinicians.
- Greater investment in research that is collaborative and cross-disciplinary, to address the gaps in our understanding.
- With disciplines working together we could take leaps forward.
- Place heart disease in pregnancy on the agenda so that women at increased risk are managed from day one.
- Implement strategies to support women in cardiology and research, including gender blind assessment of research applications.

Quotes from the panel and audience

“Gender equity is a complete culture change.”

“It doesn’t matter what measure you use, women are under-represented in leadership positions in health and medicine.”

“You may laugh, but studies have shown that women are less likely to be prescribed statins and B Blockers but more likely to receive anxiolytics.”

“The trickle-down effect of the research that is funded, and the understanding (or lack) of sex and gender differences filters down to a patient in a doctor’s office.”

“Awareness has changed a lot over time, because of the amazing people in this room, and on the panel, that have raised awareness of women’s heart disease.”

Case Study Sessions

CASE STUDY 1: DIAGNOSIS AND MANAGEMENT

The expert panel discussed two case studies. Denise is a busy mother and grandmother from regional NSW who visits her GP with breathlessness and a cough. Doris is a smoker and has a BMI of 38.6. Delores is a 60 year old also from regional NSW and presents to the local Emergency Department with nausea, light-headedness and pain in the neck for six hours. General Practice and Emergency Department approaches are discussed along with the challenges of behaviour change and access to prevention and rehabilitation resources.

Some take outs from this discussion:

- In emergency departments, women will often wait longer than six hours to get an accurate diagnosis.
- Rural and remote areas need to use their networks of support for decision making, particularly where there are nuances.
- One of the problems we have is that people feel so good after PCI they do not understand that it is a chronic condition.
- Women are also less likely to be compliant with cardiac rehabilitation and follow up medications. “The doctor said it was only a little heart attack”.
- “I would implore you to refer your patient to cardiac rehab before they leave the hospital.”
CASE STUDY 2: PREGNANCY THE ULTIMATE STRESS TEST

Expert panel discussion of Mrs SS who is 17 years old and 40 weeks pregnant when she presents at Gympie Hospital with abnormal ECG, ventricular tachycardia. She is flown to Royal Brisbane & Women’s Hospital where her history of eight years of palpitations, syncope and collapse [that was not investigated] is revealed.

What we took away from this discussion:
- Regional health care providers will often need to seek advice from their expert networks.
- Multidisciplinary teams co-ordinated to focus on outcomes for mother and baby are an integral part of optimal care.
- Issues for the multidisciplinary team include the effect of the pregnancy on the arrhythmia, and medication effects on the foetus and the breast fed baby.

CASE STUDY 3: PRE-ECLAMPSIA

The expert panel followed the journey of Mrs LK age 25, a young woman with family history of pre-eclampsia and toxaemia. She was stable until 33 weeks when she presented with sudden headache, visual loss and raised blood pressure. Her management during pregnancy is discussed along with post pregnancy counselling and long-term management of heart disease risk.

What we took away from this discussion:
- Much is still to be learned about pre-eclampsia and its prevention and management.
- The experience of pre-eclampsia can have a significant psychological impact and be a consideration in decisions for future pregnancies due to the trauma experienced.
- Management of cardiovascular risk factors is an important component of ongoing care for these women and General Practitioners have an important role to play in the ongoing monitoring and management of women who have experienced pre-eclampsia.
- Pre-pregnancy counselling and discussion of contraception options before and during pregnancy should be available.

CASE STUDY: RHEUMATIC HEART DISEASE

Expert panel discussion of Alice, a 33 year-old Aboriginal woman who is 33 weeks pregnant. Her previous pregnancy history has revealed pre-eclampsia and mitral valve prolapse & mitral regurgitation on echocardiograph. She has suffered from Rheumatic Heart Disease, but most of her health care providers are not aware of this.

The discussion reflects on Alice’s cultural and social circumstances, along with the fragmented nature of health care, and how these impact on outcomes for Alice and her baby.

Some take outs from this discussion:
- Prevention of Rheumatic Heart Disease is critical. Social and economic factors are key to eradicating this condition.
- Identification of patients who have been diagnosed from Rheumatic Fever and communication between health professionals involved in care is important across geographic and discipline boundaries.
- Women will often be long distances from family and support networks when the pregnancy is high risk.
171 Delegates were in attendance, including representatives from:

| Balmain Cardiac Rehabilitation | NSW Refugee Health Service |
| Bankstown Hospital | Parkes Health |
| Blacktown Women’s and Girls Health Centre | Prince of Wales Hospital |
| Blue Mountains Women’s Health & Resource Centre | RHD Australia |
| CASS Central Coast LHD | Royal Brisbane & Women’s Health Hospital |
| Clarence Specialist Clinic | Royal Prince Alfred Hospital |
| Concord Hospital, ANZAC Res Inst. | Ryde Hospital |
| Eastern Health School of Nursing | Sax Institute |
| Family Planning NSW | SCAD Research Inc |
| Franklin Women | St George Hospital |
| George Institute | St Vincent’s Hospital, Sydney |
| Healthwise | SWLHD Health Promotion Service |
| HeartKids | Sydney Cardiology Group |
| Her Heart Charity | Tamworth Hospital |
| Hornsby Hospital | The Cardiac Centre |
| Hunter New England LHD | The George Institute for Global Health |
| Illawarra Shoalhaven LHD - ISLHD | The Heart Foundation |
| Lismore Women’s Health & Resource Centre | The Queen Elizabeth Hospital - Adelaide |
| Lyell McEwin Hospital | University of Adelaide |
| Macarthur Diversity Services Initiative | University of Canberra |
| Mater Hospital | University of Melbourne |
| Mercy Hospital for Women Melbourne | University of Newcastle |
| Monash University | University of South Australia |
| Nepean Blue Mountains LHD North Shore Cardiac Centre | University of Sydney University of Tasmania |
| NPS Medicinewise | University of Western Australia Victor Chang |
| NSW Ambulance | Western Sydney LHD |
| NSW Health | Westmead Hospital |
| NSW Pregnancy & Newborn Services Network | WNSW LHD |
| NSW Pregnancy & Newborn Services Network | Women’s Health NSW |
| NSW Pregnancy & Newborn Services Network | Wollongong Hospital Justice Health |
During the Forum, participants were provided with survey forms to identify and comment on priority actions. The survey included recommendations from the 2016 Cardiovascular Risk and Disease in Australian Women Summit in Canberra, along with actions identified through health professional and community consultations.

The findings of the survey [and discussion documented on the day] reinforced the need for a national awareness campaign along with system change to support women throughout the life course.

### Women and Heart Disease Forum: Identifying Priority Actions

During the Forum, participants were provided with survey forms to identify and comment on priority actions. The survey included recommendations from the 2016 Cardiovascular Risk and Disease in Australian Women Summit in Canberra, along with actions identified through health professional and community consultations.

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<tr>
<th>PRIORITY</th>
<th>ELEMENTS</th>
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<tr>
<td>Awareness Raising</td>
<td>Seek federal funding for a national campaign to raise awareness of CVD in women*</td>
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<td>Health System Change</td>
<td>Better support for women through sustainable prevention and management programs*</td>
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<td>Ensure documentation of pregnancy complications become a routine part of a female heart health check</td>
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<td>Advocate for mandatory implementation of sex-specific diagnostic thresholds</td>
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<td>Integrate RF and RHD diagnosis and management with primary care and health systems across health sectors</td>
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<td>Research</td>
<td>Increase the number of definitive studies of cardiovascular risk and CVD in Australia that specifically address gender related issues*</td>
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<td>Ensure greater investment in gender specific CVD research</td>
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<td>Clinical Guidelines</td>
<td>Ensure future CVD guidelines specifically address gender related issues*</td>
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<td>Health Professionals</td>
<td>Review of relevant undergraduate and post graduate education and training for medical and nursing students to insert gender related CVD issues into the curriculum</td>
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<td>Increase mentoring of female medical trainees and research graduates</td>
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* Similar themes were identified in a Communique by the Australian Catholic University and the National Heart Foundation released following a Cardiovascular Risk in Australian Women Summit held in Canberra in October 2016.
The following steps will be implemented to facilitate progress toward these priorities:

- The Forum to be repeated in two years: 2019
- Forum content to be made more widely available as a webinar
- Priority actions to be circulated and used as a basis for advocacy
- “Action Groups” to be brought together to address priority actions

Comments from delegates

“We need to address female heart issues across the lifespan and pregnancy is a logical place to trigger this”

“The community grants programme is really good and should continue”

“Ensure the campaign has a variety of free information so that people get that information from many sources and translate into appropriate languages and culturally acceptable format”

“Look at the marketing around breast cancer and learn from that. Continue to promote gender difference at all forums”

“This is the most important issue to me as people are generally inquisitive & do ask questions, therefore give basic information and dispel myths e.g. breast cancer no. 1 killer of women to enable discussion and women to be more proactive. Knowledge is power!”

“Rheumatic Heart Disease, Acute Rheumatic fever is 100% preventable”
Women and Heart Disease Forum Program:
14 June 2017, Sydney

Morning Program - Taking it to the Community

9.00 - 9.30  Welcome
Professor Garry Jennings AO
Heart Foundation Chief Medical Advisor | Executive Director,
Sydney Health Partners

Heart Disease among Australian women
A/Prof Lynne Pressley AM
Interventional Cardiologist, Mater Hospital & Royal Prince Alfred Hospital
Clinical Associate Professor of Medicine, University of Sydney

9.30 - 10.15  The Community Development Approach
Working with local communities to raise awareness amongst regional, Aboriginal and
culturally linguistically diverse (CALD) women

Regional
Penny Milson - Regional Health Promotion Coordinator (Tamworth), Heart Foundation
Nerida Colley - Health Promotion Projects Officer, Lismore Women’s Health & Resource Centre
Fiona Robertson - Senior Primary Healthcare Nurse, HealthWISE NENW
Sarala Porter - Manager, Blue Mountains Women’s Health & Resource Centre

Aboriginal
Annie Flint - Southern NSW LHD, Representative Australian Women’s Health Network
Lou Glover - Awakened Media

CALD
Ernest Yung - Executive Support Officer, Chinese Australian Services Society Ltd (CASS)
Sharda Jogia - Senior Women’s Health Promotion Manager, South Western Sydney LHD
Sana Al-Almar - Generalist Settlement Case Worker, Macarthur Diversity Services Initiative
B-Ann Echevarria - Women’s Health Project Officer, NSW Refugee Health Service
Estela Gimenez - Multicultural Health Officer, Illawarra Shoalhaven LHD - Multicultural Health Service

10.15 - 10.45  Break

10.45 - 11.30  Heart Health Agencies working to improve women’s health
Chair: Julie Anne Mitchell - Director, Cardiovascular Health Programs, Heart Foundation NSW

Panellists:
Dr Linda Worrall Carter - CEO, Her Heart
Georgi Glover - Media and Communications Manager, Victor Chang Cardiac Research Institute
A/Prof Sanjay Patel - Heart Research Institute | Interventional Cardiologist, Royal Prince
Alfred Hospital
Rebecca Dean - NSW/ACT State Manager, Heart Kids
Afternoon Program - Advances in understanding risk, diagnosis and management

12.00 - 1.00
Welcome
Ms Rebecca Davies - President, Heart Foundation NSW Board

KEY NOTE PRESENTATION
Redefining Women’s Health in the Era of the Sustainable Development Goals
Professor Anushka Patel
Chief Scientist, George Institute | Professor of Medicine, UNSW | Cardiologist Royal Prince Alfred Hospital

The Australian Experience
Professor Garry Jennings AO - Heart Foundation Chief Medical Advisor
Executive Director, Sydney Health Partners

Challenges of management of CVD in women
1.45pm
Session A

Gender specific challenges in CVD management
Dr Jenny Yu - Interventional Cardiologist, Prince of Wales Hospital

Unravelling novel mechanisms of coronary disease in women
Dr John O’Sullivan - Professor of Medicine, University of Sydney Interventional Cardiologist, Royal North Shore Hospital

Gender specific difference in patients with suspected ACS
Professor Louise Cullen - Senior Staff Specialist, Emergency Medicine, RB&WH Brisbane

Early treatment and mortality differences in heart disease related to
Dr Lisa Kuhn - Alfred Deakin Post-Doctoral Research Fellow Eastern Health School of Nursing and Midwifery, Faculty of Health

Issues in secondary prevention for
A/Professor Julie Redfern - Deputy Director, Cardiovascular Division, George Institute for Global Health

Pregnancy–the ultimate stress test
1.45pm
Session B

Pregnancy – the ultimate stress test
Chair: Professor Gemma Figtree

Pregnancy - the ultimate stress test
Professor Gemma Figtree - Interventional Cardiologist, Royal North Shore Hospital
Professor of Medicine, University of Sydney

The burden of cardiac disease in pregnancy
Professor William Parsonage - Senior Staff Cardiologist, RB&WH Brisbane | Clinical Director, The Australian Centre for Health Service Innovation, Qld University of Technology

Cross-disciplinary management of cardiac disease in pregnancy
A/Professor Karin Lust - Interim Clinical Director - Obstetrics and Gynaecology, Women’s and Newborn Services, RB&WH Brisbane

Contraception: options for women with heart disease
A/Professor Deborah Bateson - Medical Director, Family Planning NSW | Clinical A/Professor Discipline of Obstetrics, Gynaecology and Neonatology, University of Sydney
Women and Heart Disease Forum Program:
14 June 2017, Sydney

Pre-eclampsia
1.45pm
Session C

**Pre-eclampsia**

Chair: **Dr Clare Arnott**  The impact of pregnancy on future health

**Dr Jane Tooher** - Research Midwife, Royal Prince Alfred Hospital

**Pre-eclampsia and its relationship to cardiovascular disease**

**Professor Jon Hyett** - Head of High Risk Obstetrics/Staff Specialist in Obstetrics and Maternal and Foetal Medicine, Royal Prince Alfred Hospital

**Post partum vascular assessment and cardiovascular outcomes**

**A/Professor Sanjay Patel**  Interventional Cardiologist, Royal Prince Alfred Hospital and Dr Clare Arnott and Cardiologist, Royal Prince Alfred Hospital

**The Pre-eclampsia P4 Study**

**A/Professor Greg Davis** - Obstetrician, Gynaecologist School of Women and Children's Health, St George Hospital

Research Frontiers
1.45pm
Session D

**Research Frontiers**

Chair: **Professor Liza Thomas**  Populations of women at risk: cardiotoxicity

**Professor Liza Thomas** - Staff Cardiologist and Clinical Lead for non-invasive imaging Westmead Hospital | Conjoint Professor, University of Sydney and UNSW

**Cardiac risk post breast cancer treatment**

**Dr Charlotte Lemech** - Oncologist, Medical Director at Scientia Clinical Research - Prince of Wales Hospital

**Understanding risk associated with menopause**

**Professor Rod Baber** - Clinical Professor of Obstetrics and Gynaecology, Sydney Medical School North University of Sydney

**Spontaneous Coronary Artery Dissection (SCAD)**

**Professor Bob Graham** - Executive Director, Victor Change Cardiac Research Institute

3.30 - 4.15  Four Concurrent Case Study Panel Sessions:

1. **Challenges in diagnosis and management**

Chair: **Helen Orvad** - Clinical Nurse Consultant Cardiology, Hunter New England Area Health

Panellists:

**Professor Louise Cullen** - Senior Staff Specialist, Emergency Medicine, RB&WH Brisbane

**Dr Jenny Yu** - Interventional Cardiologist, Prince of Wales Hospital

**A/Professor Julie Redfern** - Deputy Director Cardiovascular Division, George Institute for Global Health

**Professor Gemma Figtree** - Interventional Cardiologist, Royal North Shore Hospital | Professor of Medicine, University of Sydney

Dr Lauren Cone - Clinical Dean, University of Newcastle Department of Rural Health | Representative RACGP

2. **Pregnancy - the ultimate stress test**

Chair: **A/Professor Lynne Pressley AM** - Interventional Cardiologist, Mater Hospital & Royal Prince Alfred Hospital Clinical Associate Professor of Medicine, University of Sydney

Panellists:

**A/Professor Karin Lust** - Interim Clinical Director - Obstetrics and Gynaecology, Women's and Newborn Services, RB&WH

**A/Professor Deborah Bateson** - Medical Director, Family Planning NSW | Clinical A/Prof, Discipline of Obstetrics, Gynaecology and Neonatology, University of Sydney

**Professor William Parsonage** - Senior Staff Cardiologist, RB&WH Brisbane | Clinical Director, The Australian Centre for Health Service Innovation, Qld University of Technology

**Ms Lynette Passant** - Clinical Midwifery Consultant, Pregnancy and Newborn Services Network

**Professor Rod Baber** - Clinical Professor of Obstetrics and Gynaecology, Sydney Medical School North University of Sydney
3. Pre-eclampsia and long-term heart health

Chair: **Professor Mark Brown** - Director, Department of Renal Medicine, St George Hospital. Conjoint Professor at St George & Sutherland Clinical School

Panellists:
- **A/Professor Greg Davis** - Obstetrician, Gynaecologist School of Women and Children's Health, St George Hospital
- **Professor Jon Hyett** - Head of High Risk Obstetrics/Staff Specialist in Obstetrics and Maternal and Foetal Medicine, Royal Prince Alfred Hospital
- **A/Professor Sanjay Patel** - Interventional Cardiologist, Royal Prince Alfred Hospital
- **Dr Clare Arnott** - Cardiologist, Royal Prince Alfred Hospital
- **Ms Lynne Roberts** - Research Midwife, St George Hospital
- **Ms Alison Goodfellow** - Clinical Midwifery Consultant, NSW Pregnancy and Newborn Services Network
- **Dr Jodie Emanuel** - General Practitioner, Cooper Street Clinic, Double Bay

4. Aboriginal Women and Rheumatic Heart Disease

Chair: **Professor Elizabeth Sullivan** - A/Deputy Vice Chancellor Research|Professor of Public Health UTS |Principal Investigator, AMOSS

Panellists:
- **Dr Marilyn Clarke** - Staff Specialist, Department of Obstetrics and Gynaecology, Grafton Base Hospital
- **Dr Melissa Doohan** - Cardiologist, Sydney Adventist Hospital and North Shore Private Hospital | Honorary Associate Sydney Medical School (POCHE Centre for Indigenous Health)
- **Ms Geraldine Vaughan** - Research Coordinator, Australiasian Maternity Outcomes Surveillance System (AMOSS)
- **Ms Linda Bootle** - Aboriginal Maternal Infant Health Service | Clinical Midwife Consultant / Integrated Primary Care and Partnership

4.15 - 5.30 Facilitated panel discussion - Gender and sex in media, research and cardiovascular health

Where are the gaps and what are the opportunities?

Chair: **Sophie Scott**

Panellists:
- **Dr Kerry Chant** - Chief Health Officer and Deputy Director General, Population and Public Health, NSW Health
- **Dr Melina Georgousakis** - Founder, Franklin Women
- **Professor Chris Semsarian AM** - Professor of Medicine, University of Sydney | Cardiologist, Royal Prince Alfred Hospital | NHMRC Practitioner Fellow
- **Professor Elizabeth Sullivan** -Deputy Vice Chancellor Research | Professor of Public Health UTS Principal Investigator, AMOSS
- **Dr Adrienne O’Neil** - Senior Research Fellow, Centre for Mental Health | Melbourne School of Population and Global Health
- **A/Professor Lynne Pressley AM** - Interventional Cardiologist, Mater Hospital & Royal Prince Alfred Hospital, Clinical Associate Professor of Medicine, University of Sydney

5.30 - 5.40 Five Key Actions from the Forum

**Professor Garry Jennings AO**
Appendix 2

Survey Comments

**AWARENESS RAISING**

“This is the most important issue to me as people are generally inquisitive & do ask questions, therefore give basic information and dispel myths e.g. breast cancer no. 1 killer of women to enable discussion and women to be more proactive” *Knowledge is power!*

“Scale this to primary health networks eg. upskill pharmacists to consult on reducing CV risk factors in the setting of a GP practice”

“Community grants programme is really good and should continue”

“Ensure the campaign has a variety of free information so that people get that information from many sources and translate into appropriate languages and culturally acceptable format”

“Very difficult to rank as all important but I would just like to stress the importance of including contraception across all domains as it is pivotal for planning pregnancies to optimal outcomes (low awareness of options amongst women, her partner and health professionals and little research)”

“Rheumatic Heart Disease, Acute Rheumatic fever is 100% preventable”

Promotion of a range of new, free exercise regimes eg. group exercise on Bondi Beach, in Hyde Park etc. After work so women can go with their colleagues in a social setting”

“Involves professional groups such as Midwives Association, Nurses Association, Nurses & Midwives Association”

“To overtake the ‘Go 4 Pink’ campaign and raise awareness that CVD is more of a killer than breast cancer. After all, “pink is a pale red”

“Update the chest pain action plan to include women’s specific symptoms”

“Look at the marketing around breast cancer and learn from that. Continue to promote gender difference at all forums”

“This should be “standard ongoing program/and practice”

**CLINICAL GUIDELINES**

“RHD in pregnancy”

“This will take time but should be “policy” to incorporate best practice and or evidence based practice”

“Assessment and management: - multi-disciplinary - condition for later heart disease”

“Pre-pregnancy or pre-conception care - post-partum care”

“Cardiac disease in pregnancy and anti-coagulation”

“Need to include ‘gender based’ information in all new and update existing guidelines”

“GP Guidelines on women and symptoms and screening”

“Women can be asked to go to their GP but the power differential will render their cries for attention useless with GPs who don’t take women’s pain symptoms seriously”
WORKING WITH HEALTH PROFESSIONALS

“It would be good to have female role models in science and research, education and training – break the glass ceiling”

“Try to get “policy” reviewed so that organisations/institutions insert evidence in an ongoing way”

“More sessions at places like CSANZ specific to women and HD – like the day in 2014 in Melbourne I’m not sure this is No.5, but it’s a long-term goal that will take time to change behaviours/beliefs”

“Mentoring of female medical graduates and nursing and midwifery trainees: we don’t want to create a parallel structure, though it is important aspect for women’s general development. Need programs within the public and private health system to address this”

“We need CALD bilingual GPs, specialists who can be champions for CALD women within their communities also”

“Must involve multi-disciplinary approach not just medics, nurses, midwives, nursing and allied health students”

“Frequent, short sessions to update core staff”

“Only 15% female cardiologists in NSW which needs to be addressed. Approach training/accreditation for their gender policy”

“Women’s health related service placements should have CVD related knowledge, skill outcomes – could be maternity, could be gynae, could be women’s health primary care services – students should demonstrate they have implemented this knowledge in some way – develop a simple tool for students to use on placement that supervisors can use”

HEALTH SYSTEM CHANGE

“Realistically, system changes won’t occur without research and evidence based practice. Sharing health records. A reliable, usable electronic system”

“It was frightening to hear the lack of management in Australia emergency departments”

“Collect gender data from local cath lab and other cardiac services”

“Need to address female heart issues across the lifespan and pregnancy is a logical place to trigger this”

“Sustainable prevention and management programs”

“Expansion to rural areas”

“Documentation of pregnancy complications”

“In line with childhood vaccination register to continue to monitor at (CV) risk mothers after pregnancy”

“Post-partum follow up.”

“Some guidelines/clarity on follow up and surveillance of at risk women should be useful”

RESEARCH

“Once we have the evidence that women differ in physiology and pathologies of this diseases, other things can get in place”

“Screening cardiac echo in pregnancy”

“Clear articulation of required research across different disciplines e.g., medical/nursing/allied heart/health promotion/epidemiology/clinical research/public health”

“Mentoring of female heart disease researchers across discipline in addition to medicine” “Research into people who have no risk factors is imperative M:F and further research could be developed regarding the structural issues/differences related to these”

“Requirement for any HF funded research to provide gendered results. Consider funding a longitudinal study on pregnancy complications”

“Gender specific CVD research—implement as the standard”

“Pregnancy related - especially CHD, HT and pregnancy research”

“Women’s perceptions of their pain as it relates to heart health to learn about how GPs can probe questioning with women in general practice”
THANK YOU TO

OUR SPONSORS
Abbott Vascular for their ongoing support and sponsorship of the NSW Women & Heart Disease project. Abbott Diagnostics for sponsoring the Concurrent Session Challenges of Management of CVD in Women.

THE HEART FOUNDATION DONORS AND SUPPORTERS
The Heart Foundation would like to thank the donors and supporters who have enabled the NSW Women & Heart Disease Program to be rolled out as a comprehensive program working with community, clinical and research partners.

TO THE WOMEN WHO HAVE TOLD THEIR STORIES
Hearing women’s stories has been the inspiration behind the Women & Heart Disease program in NSW. Thank you for sharing this most personal of experiences and helping other women to hear the messages.

THE HEARTS AND HEELS CARDIOLOGISTS
The cardiologists who have taken part in the Hearts and Heels Cardiology Roundtable dinners have helped to shine a light on the clinical issues faced by women, and provided the spark that lead to the 2017 Women & Heart Disease Forum. Thanks in particular to A/Professor Lynne Pressley for her guidance and generosity.

THE HEART FOUNDATION TEAM
Thanks to all of the Heart Foundation staff who have contributed to making this Forum happen. Special thanks to Angela Hehir, Women & Heart Disease Manager along with Event team Jayne Farley and Celeste Ambalong.

Accessing the Webinar: Makingtheinvisiblevisible.org.au

Julie Anne Mitchell, National Heart Foundation’s spokesperson on Women’s Heart Health, writes on her reflections following the inaugural women and heart disease forum in Sydney on the 14th June.

For over 10 years the Heart Foundation has championed a program to raise women’s awareness of heart disease, but it’s been a hard slog. We know that most women fear breast cancer and that heart disease is often categorised as a male only concern.

At our recent women and heart disease forum however, it felt different. The interest shown in the issue by those present was uplifting and generated hope.

For the first time, we brought together 170 of the country’s leaders in cardiology, obstetrics, emergency medicine, oncology and public health to address gender disparities in heart disease from a multi-disciplinary perspective.

Over the course of the day, case studies were presented and debated from a range of viewpoints. The global and local nature of heart disease in women was described. Attention was paid to the vascular complications of gestational diabetes and hypertension in pregnancy and how this can be a clarion call for heart disease risk later in life. Focus was paid to the cardiotoxic nature of some breast cancer treatments and how this can increase heart failure risk. Health system improvements were debated and workforce issues were discussed. We also heard of community initiatives to raise awareness of heart disease amongst rural women, Aboriginal women, female refugees and migrant women who fight social, physical and cultural isolation in many aspects of their lives, which in turn, impacts on their heart health.

The day was stimulating, challenging, and ultimately energising. Connections were made, ideas shared and enthusiasm for working more closely together was freely expressed.

In holding this inaugural event it feels like something has fundamentally shifted. A repeat conference two years from now will be the true measure of whether this instinct is a false dawn or a sign of something greater.

However, with the amount of feedback and engagement we have received since the forum, I am optimistic that this issue is moving from the shadows into the light.

Join us in championing the five actions arising from the day and be there in 2019 when we can report on progress.

Follow Julie Anne Mitchell on @julieannemitch

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