



# ACRA

2014

24TH ANNUAL SCIENTIFIC MEETING

NOVOTEL SYDNEY BRIGHTON BEACH, NSW

21 - 23 AUGUST 2014

FINAL PROGRAM & ABSTRACT BOOK

[www.acra2014.com.au](http://www.acra2014.com.au)



## ACKNOWLEDGEMENTS

The Organising Committee is grateful to the following companies for their support of the Meeting:

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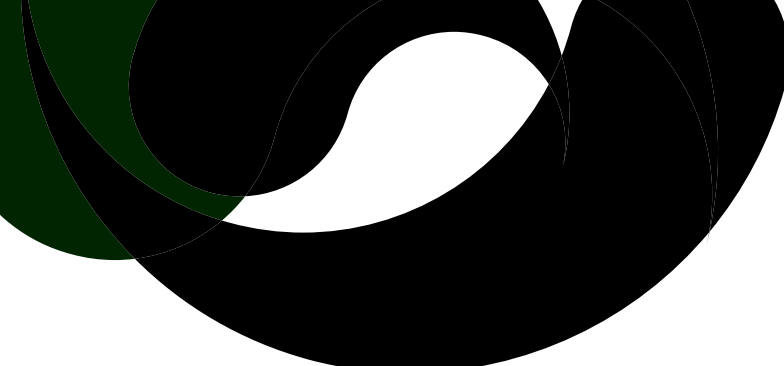


### ADDITIONAL SPONSORS



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## WELCOME

Welcome to the 2014 Annual Scientific Meeting of the Australian Cardiovascular Health and Rehabilitation Association (ACRA). It is wonderful to be holding the meeting in Sydney and we hope you find the program stimulating, enjoyable and relevant. Enormous thanks to all the people who worked tirelessly to put this meeting together, including the Scientific Committee, the Organising Committee and the fantastic team at The Association Specialists. We are indebted to our sponsors without whom this meeting would not be possible. Please make sure you speak to them and thank them for their support.

As always we value your feedback and make every attempt to incorporate the feedback we get from our meetings into the program so that we bring you what you most request.

I hope you will find this conference not only of great benefit during the sessions, but also as you meet with colleagues and network during the breaks.

With very best wishes,

*Lis Neubeck and Dawn McIvor*

## ORGANISING COMMITTEE

Dawn McIvor, *John Hunter Hospital, Newcastle, NSW (Co-Convenor)*

Lis Neubeck, *University of Sydney, Sydney, NSW (Co-Convenor)*

Pamela Maryse Arndt, *St George Hospital, Sydney, NSW*

Julie Belshaw, *Hornsby Ku-ring-gai Health Service, Sydney, NSW*

Sasha Bennett, *St Vincent's Hospital, Sydney, NSW*

Deb Carter-Hendy, *Pittwater RSL Sub-Branch, Sydney, NSW*

Susan Hales, *Ryde Hospital, Sydney, NSW*

Joanne Leonard, *Wagga Wagga Base Hospital, Wagga Wagga, NSW*

Jessica Orchard, *The George Institute for Global Health, Sydney, NSW*

Leonie Sadler, *Manly Hospital, Sydney, NSW*

Tracy Schumacher, *University of Newcastle, Newcastle, NSW*

Rhonda Turnbull, *Port Macquarie Base Hospital, Port Macquarie, NSW*

## SCIENTIFIC PROGRAM COMMITTEE

Robyn Gallagher, *University of Sydney, Sydney, NSW (Co-Chair)*

Ritin Fernandez, *University of Wollongong, Wollongong, NSW and St George Hospital, Kogarah, NSW (Co-Chair)*

James Faulkner, *Massey University, Wellington, New Zealand*

Cate Ferry, *The National Heart Foundation of Australia, Sydney, NSW*

Nicole Lowres, *The University of Sydney, Sydney, NSW*

Steve Woodruffe, *Ipswich Hospital, Ipswich, QLD*

## INTERNATIONAL KEYNOTE SPEAKER

### Lee Stoner



Lee Stoner read for a B.Sc in Sport Sciences at Brunel University, England, and then completed an M.A. and Ph.D. in Exercise Physiology at the University of Georgia, U.S.A. Following the completion of his Ph.D., he accepted a Clinical Research Fellow position with the Lipid and Diabetes Research Group in Christchurch. Since November 2011 Lee has been a Lecturer in the School of Sport and Exercise at Massey University. He is interested in the following lines of enquiry:

1. Interactions between lifestyle risk factors and cardiovascular disease etiology, with a focus on exercise prescription.
2. Mechanisms underlying cardiovascular disease etiology.
3. Development and interpretation of noninvasive methodologies for assessing cardiovascular disease risk.
4. Global health and indigenous health concerns.

## NATIONAL KEYNOTE SPEAKERS

### Susie Burrell



Susie Burrell has studied both Psychology and Nutrition & Dietetics at Wollongong University. She then worked at The Children's Hospital at Westmead for 8 years working in the area of childhood obesity, and as a sports dietitian to a number of professional teams including the St George Illawarra Dragons and the South African Blue Bulls.

Susie loves to write and has published three books, *Losing the last 5kg*, *Lose Weight Fast* and *The Monday to Friday Diet*. Her writing can also be seen in the *Australian Women's Weekly*, *Women's Fitness*, *Woman's Day*, *That's Life*, *Men's Fitness*, *Bicycling Australia* and at [www.taste.com.au](http://www.taste.com.au). Susie is the resident nutritionist on the Channel 7

top breakfast program *Sunrise* and she also regularly appears on *Today Tonight*.

# SPEAKER PROFILES

## NATIONAL KEYNOTE SPEAKERS

### Rosie King



Rosie King graduated from the medical faculty at the University of New South Wales in Sydney in 1976, and is a specialist in sexual medicine. She is a Fellow of the Royal Australasian College of Physicians in the chapter of Sexual Health Medicine and has had over 35 years of clinical experience in sex and relationship counselling.

Rosie King is a visiting lecturer in the medical faculty at the University of NSW. She is a past president and lifetime member of the Australian Society of Sex Educators, Researchers and Therapists. Rosie King is also a best-selling author. Her most recent book for women with low sexual

desire is called “Where did my libido go?”

### Chris Semsarian



Chris Semsarian is a cardiologist with a specific research focus in the genetic basis of cardiovascular disease. He trained at the University of Sydney, Royal Prince Alfred Hospital, and Harvard Medical School. A focus area of his research is in the investigation and prevention of sudden cardiac death in the young, particularly amongst children and young adults. Chris Semsarian has an established research program which is at the interface of basic science and clinical research, with the ultimate goal to prevent the complications of genetic heart diseases in our community.

He has published over 120 peer-reviewed scientific publications, in the highest-ranking cardiovascular and general medical journals. He is the leader of a number of national studies in genetic heart diseases and sudden death, and collaborates widely both nationally and internationally. Chris Semsarian is the director of two specialty clinics at RPAH, the Genetic Heart Disease and Hypertrophic Cardiomyopathy Clinics. He is also been the primary supervisor of over 30 PhD, honours, and medical honours students since 2003, and is an active member of the mentoring program at the University of Sydney.

### Rachel Wotton



Rachel Wotton has been a migrant sex worker since 1994, working both in Australia and overseas. Rachel’s previous roles as International Spokesperson for Scarlet Alliance ([www.scarletalliance.org.au](http://www.scarletalliance.org.au)) and as a peer Outreach Officer at SWOP NSW, gave her the opportunity to present sex worker issues at numerous local and international conferences, while networking with sex workers from around the globe.

She is a founding member of Touching Base ([www.touchingbase.org](http://www.touchingbase.org)), which brings people with disability and sex workers together to advocate for the rights for both communities and to decrease stigma and discrimination. In 2009, she was also involved with the formation of a new sex worker activist group called Nothing About Us Without Us.

Rachel was featured in an SBS documentary, *Scarlet Road*, which had its International Premiere at the International Sydney Film Festival, June 2011. Since then it has been broadcast in at least 7 other countries and screened at numerous Film Festivals around the world. Rachel spends her time between her sex work, Touching Base activities and guest lecturing at universities and conferences.

### INVITED SPEAKERS

#### Sasha Bennett



Sasha Bennett is a pharmacist with experience in hospital and community clinical practice. Her PhD investigated the significance of a neurohormonal and multidisciplinary approach to the optimal management of heart failure. She has a keen interest in the chronic management of cardiovascular diseases and is the pharmacist for the Cardiac Rehabilitation Program at St Vincent's Hospital, Sydney. Sasha is also accredited to perform Home Medicines Reviews. She is currently Executive Officer, NSW Therapeutic Advisory Group, a not-for-profit organisation representing NSW public hospital drug and therapeutic committees and clinicians such as clinical pharmacologists, pharmacists and other health care professionals promoting the safe and effective use of medicines across the continuum of care.

#### Tom Briffa



Tom Briffa, is a health researcher at the University of Western Australia where he is Head of Cardiovascular Research in the School of Population Health. He is an accomplished clinician/researcher with specific expertise in clinical cardiovascular epidemiology, models of care and disease prevention. He is an active contributor to guidelines for cardiac rehabilitation/secondary prevention and holds numerous honorary positions with peak national and state health agencies.

#### Craig Cheetham



Craig Cheetham has been the Director of Cardiovascular Care WA, an organisation providing hospital, community and technology based cardiovascular prevention and rehabilitation for 15 years. Prior to this worked at Royal Perth Hospital within the Cardiac Transplant Unit and Advanced Heart Failure Service. He is a past President of ACRA and has sat on the ACRA executive board for 14 years. He is a life member of ACRA, receiving the Distinguished Service Award in 2012. In 2012 he was also awarded the National Exercise Physiologist of the Year award by Exercise and Sports Science Australia. He is also President of WACRA, an Adjunct Lecturer at the University of WA and sits on a number of committees including the WA Health Department's Cardiovascular Health Network's - Executive Advisory Group, Heart Foundations (WA) Cardiovascular Health Programs Committee, and provides consultation and range of clinical services to Aboriginal Medical Services, Medicare Locals and other organisations.

# SPEAKER PROFILES

## INVITED SPEAKERS

### Gemma Figtree



Gemma Figtree is physician/scientist. She is Professor in Medicine at the University of Sydney where she heads the Cardiac Oxidative Signalling Laboratory; and an interventional cardiologist at Royal North Shore Hospital participating in the acute infarct roster. She has established the Division for Advanced Cardiovascular Imaging at Royal North Shore Hospital. She completed her DPhil in molecular biology at Oxford University in 2002 supported by a Rhodes Scholarship.

Gemma's passion for clinical and molecular Cardiology led her to pursue research in Cardiac Magnetic Resonance. Her Group contributes to advances in cardiac MRI acquisition, analysis and clinical application and has published work in highly ranked Cardiovascular journals. Gemma has developed close collaborations both nationally and internationally, and the impact of her work is reflected not only by high impact publications (74 publications and 1 book), but also by national and international speaking invitations. She is a principal investigator on grants from NHMRC, Heart Research Australia, Sydney Medical Foundation and the Royal Australian College of Physicians that have totalled >\$3.5 mill. She is currently co-funded by a NHMRC Career Development Fellowship and a Heart Foundation Future Leader Fellowship.

Gemma is actively involved in scientific peer review, on the Editorial Board for multiple international journals, and acting as a reviewer for high impact journals and for the NHMRC. She was a member of the scientific organizing committee for Imaging Australasia in 2012-13; and has been nominated as the Convenor of Cardiac Society of Australia and New Zealand Annual Scientific Meeting for 2015.

### Robyn Gallagher



Robyn Gallagher has been working in cardiovascular nursing research for many years and was awarded her PhD in 2001 based on a randomised controlled trial of telephone follow-up for women who had experienced cardiac events. Dr Gallagher is an Associate Professor of Chronic and Complex Care and Director, Research Students at the University of Technology, Sydney. Her program of research has primarily focused on supporting recovery and self-management in cardiovascular disease. Her research has received the Cardiac Society of Australia and New Zealand Nursing Affiliate Prize and the American Heart Association

Council on Cardiovascular Nursing Research Article of the Year Award in 2012. Robyn has more than forty original research publications, eight book chapters and more than thirty published abstracts.

### Elizabeth Halcomb



Elizabeth Halcomb is the Inaugural Professor of Primary Health Care Nursing at the University of Wollongong and has been a registered nurse for 18 years. She has a strong background in research around nursing in general practice, nursing workforce and nurse education. Her clinical interests are in chronic disease and lifestyle risk factor reduction. She was the Chief Investigator on an Australian Research Council funded Study to develop and test a model of telemonitoring for community dwelling older people with chronic disease in Australian general practice.



### Tanya Hall



Tanya has over 10 years' experience in the NFP sector and through her own struggle with heart disease founded hearts4heart in 2011, a national not-for-profit organisation supporting and educating adults living with heart disease. Tanya's achievements have already been recognised by various awarding organisations including receiving a Cali (Community, Action, Leadership and Inspiration) award and shortlisted to the top 5 for Woman of the Year in 2013.

Through hard work and advocacy Tanya met with Trudie at CSANZ and shared a common goal and mission to promote better understanding, diagnosis, treatment and quality of life for those affected by heart rhythm disorders (cardiac arrhythmias). Hearts4heart is now affiliated to Arrhythmia Alliance and Tanya is leading Arrhythmia Alliance – Australia as the organisation's CEO.

### Annabelle Hickey



Annabel has extensive experience in establishing new models of cardiac care and service improvement, starting with the Brisbane Cardiac Consortium in 2000 (which was part of the national Clinical Support Systems Program), and then establishing the first Queensland multidisciplinary heart failure pilot programs in 2005, which led to the establishment of 23 programs across the state which she now coordinates. She supports multidisciplinary heart failure teams across Queensland by coordinating clinical training, preceptorships, professional interest groups and forums, a consumer advisory group,

and by the reporting of key performance indicators. She has refereed publications in areas related to methods for the improvement of medication titration; the use of clinical indicators in cardiac care; and the promotion of long-term exercise with heart failure.

### Laura de Keizer



Laura de Keizer is a Project Officer at the George Institute for Global Health. She is currently coordinating the TEXT ME Secondary Prevention Program at Westmead Hospital in Western Sydney.

With a background in nutrition and public health her interests include nutrition promotion and mobile health (mHealth) initiatives.

Laura is currently enrolled in a Masters of Public Health at the University of Sydney.

# SPEAKER PROFILES

## INVITED SPEAKERS

### Paul Lam



Paul Lam, a practicing family physician and tai chi master for more than 30 years, is a world leader in the field of tai chi for health improvement. Paul worked with a team of Tai Chi and medical specialists to create several Tai Chi for Health programs since 1997. They are easy and enjoyable to learn, bringing with them the many health benefits safely and quickly. Since then, medical studies have shown are safe and effective to improve health. Over two million people around the world have learnt the programs for health and enjoyment.

### Claire Lawley



Claire Lawley is a Medical Officer at Royal North Shore Hospital. She has an interest in cardiovascular health and imaging, particularly in the setting of Women's and Children's Health. In parallel with her clinical work, Claire is undertaking a PhD at The University of Sydney exploring valvular heart disease and artificial heart valves in pregnancy. She was the first author on a manuscript describing the evaluation of trastuzumab cardiotoxicity by magnetic resonance imaging in women with breast cancer. She has published in peer-reviewed journals in the fields of cardiovascular imaging and clinical oncology. As well as this,

Claire has participated in the tutoring of medical students and research exploring teaching teamwork skills in medical education. She was an associate editor of the peer-reviewed Australian Medical Student's Journal at the journal's inception in 2009. Claire is committed to improving cardiovascular health through her ongoing clinical training and research.

### Nicole Lowres



Nicole is a physiotherapist specialising in secondary prevention. Nicole has been engaged in cardiac research for the past 5 years and is currently completing her PhD. Her current research is in the area of Atrial Fibrillation with a focus on both screening using innovative technology, and lifestyle interventions.

### Bill Lynch



Bill Lynch is a consultant urologist at the St George Hospital. After completing his fellowship in Australia he underwent further training at the Royal London Hospital under Prof John Blandy. He also had an academic appointment at the London University College. He has a particular interest in the minimally invasive treatment of prostate disease (both benign and malignant) and has pioneered laser therapy, HIFU and cryotherapy in Australia. His internationally recognised expertise in functional urology has led to the development of treatment protocols for complications from surgery for urological cancers such as incontinence and erectile dysfunction. His current research interests concern interactions between men's health issues (in general) and specific urological conditions, including lower urinary tract symptoms and erectile dysfunction.

### Julie Anne Mitchell



Julie Anne Mitchell is the NSW Director of Cardiovascular Health programs at the Heart Foundation. She has been with the Heart Foundation since 2006 and has responsibility for overseeing a range of cardiovascular health programs in NSW covering the areas of nutrition, physical activity, tobacco control and clinical issues.

She was National chair of the Heart Foundation's women and heart disease program called "Go Red for Women" from 2008-12 and she continues to be the Heart Foundation 'national spokesperson' on women and heart disease. Currently she is the Heart Foundation's

National Lead on Secondary Prevention.

Previously Julie Anne has worked in the areas of tobacco control, public health nutrition and women's health. A major focus of her work has been in the development and implementation of public health policy. In 2013 she was recognised as a Finalist in the NSW Telstra Business Women's Awards for her work in promoting heart health messages to Australian women.

### Lis Neubeck



Lis Neubeck is a Senior Lecturer at the Charles Perkins Centre and Sydney Nursing School. She is an NHMRC early career fellow and an Honorary Senior Research Fellow at the George Institute for Global Health. Her research focuses on innovative solutions to secondary prevention of cardiovascular disease, identification and management of atrial fibrillation, and use of new technologies to improve access to health care.

Lis is Vice President of the Australian Cardiovascular Health and Rehabilitation Association, an executive member on the Cardiovascular Health and Rehabilitation Association of NSW and ACT, and is on the board of the Cardiovascular Nursing Council of the Cardiac Society of Australia and New Zealand.

# SPEAKER PROFILES

## INVITED SPEAKERS

### Chris Russell



Heart  
Research  
Australia

Agricultural Scientist - Chris Russell is probably most well known from his long standing role as a Judge on the popular ABC TV series “The New Inventors”. However Chris is also a proud Ambassador for Heart Research Australia following his “near miss” heart attack in 2004 when he fell into some very cold water in the Hawkesbury River.

Chris has spent the last thirty years working in various technical and commercial roles in over 30 countries including a UN sponsored mission to Mongolia to help the nomadic herders adapt to a privatised economy after the collapse of the USSR in 1992.

Currently he is Technical Director and Joint CEO of a group of companies focused on innovation in agriculture and industry and the Australian correspondent on the National “Farming Show” on the Newstalk ZB radio network in New Zealand.

For his contribution to the profession of agricultural science – he was created a Fellow of the Australian Institute of Agricultural Science and Technology in 1997 and in 2014 the Australian Institute of Agriculture created the “Chris Russell Medal of Excellence” for the top graduating student in agricultural science in NSW.

### Prash Sanders



Prash Sanders is the Director of the Centre for Heart Rhythm Disorders at the University of Adelaide and Royal Adelaide Hospital, Adelaide, Australia. After graduating with Honours from the University of Adelaide, he undertook electrophysiology training under the mentorship of Professors Jonathan Kalman in Melbourne and Michel Haissaguerre in Bordeaux, before returning to Australia. He has published extensively in the area of heart rhythm disorders with over 250 original manuscripts.

### Steve Woodruffe



Steve is an Accredited Exercise Physiologist (AEP) and Exercise and Sport Science Australia (ESSA) Member (Exercise Scientist). He has worked extensively in clinical cardiac rehabilitation and heart failure exercise programs/services over the past 13 years. Currently he works with the Ipswich Cardiac Rehabilitation and Heart Failure Service, a role held for the past eight years.

Steve is also the current President of the Australian Cardiovascular Health and Rehabilitation Association, a position held since August 2013. Through this role, Steve represents ACRA on numerous groups including the International Council of Cardiovascular Prevention and Rehabilitation, the Global Alliance for Secondary Prevention and the Secondary Prevention Alliance of Australia.

# SOCIAL FUNCTIONS

## WELCOME RECEPTION

**Venue:** Level 1, Endeavour 3, Novotel Sydney Brighton Beach

**Date:** Thursday, 21 August 2014

**Time:** 1830 – 2000 hours

**Cost:** Included in all full registration types  
Additional tickets \$65 per person

**Dress:** Smart Casual

The Welcome Reception, officially commencing the ACRA ASM 2014, is a fantastic opportunity to meet and greet with fellow delegates over canapés and drinks, while listening to select moderated poster presentations.

## WALK ON BRIGHTON BEACH

**Venue:** Meet at Reception, Novotel Sydney Brighton Beach

**Date:** Friday, 22 August 2014

**Time:** 0630 – 0700 hours

**Cost:** Included in all registration types

**Dress:** Casual

Start your morning early and enjoy the stunning beachfront views with a walk on Brighton Beach. All delegates are invited to participate, and will meet at the Front Desk in the Reception area before heading down to the beach.

## GALA DINNER – ROCK 'N' ROLL THEME

**Venue:** Level 1, Endeavour 1&2

**Date:** Friday, 22 August

**Time:** 1900 – 2300 hours 2014

**Cost:** Included in all full registration types  
Additional tickets \$120 per person

**Dress:** Casual/Costume

An exciting evening of live entertainment, fine dining and wine is planned for the Gala Dinner. We hope all delegates and their guests will join us on this occasion to make it an unforgettable evening. Please wear your best rock 'n' roll outfits as prizes will be awarded for best dressed on the night!

## GENERAL INFORMATION

### ACRA 2014 MEETING SECRETARIAT



C/- The Association Specialists  
PO Box 576  
Crows Nest NSW 1585 Australia  
T: +61 2 9431 8600  
F: +61 2 9431 8677  
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**[www.acra2014.com.au](http://www.acra2014.com.au)**

### ACRA 2014 VENUE

Novotel Sydney Brighton Beach



Cnr. Grand Parade & Princess Street  
Brighton-le-Sands NSW 2216 Australia  
T: +61 2 9556 5111  
F: +61 2 9556 5119  
**[www.novotelbrightonbeach.com.au](http://www.novotelbrightonbeach.com.au)**

### CAR PARKING

Parking is located off Princess Street. There are three levels of undercover secure parking, special guest rates are \$15 per day and \$25 for overnight.

### PUBLIC TRANSPORT

Novotel Sydney Brighton Beach is ideally located, overlooking the white sandy beaches of beautiful Botany Bay. It is only 20 minutes from Central Sydney and just 5 minutes from Sydney Airport's domestic and international terminals. Rockdale Train Station is the closest to the venue, and frequent buses run along The Grand Parade, the nearest bus stop to the venue is The Grand Parade near Princess Street.

### CREDIT CARDS

Credit cards accepted at the registration desk are MasterCard, Visa and American Express. American Express cards will incur a 3.5% credit card processing fee on the full amount.

### DISCLAIMER OF LIABILITY

The Organising Committee, including the ACRA 2014 Meeting Secretariat, will not accept liability for damages of any nature sustained by participants or their accompanying persons or loss of or damage to their personal property as a result of the Meeting or related events.

## HOTEL ACCOUNTS

All delegates are reminded to pay their hotel account prior to departure from the hotel. Each delegate is responsible for the payment of incidentals and room costs incurred as part of their stay.

## NAME BADGES

Each delegate will be given a name badge at the registration desk. This badge will be the official pass to sessions, teas, lunches and official social functions. It is necessary for delegates to wear their name badges at all times when onsite.

## REGISTRATION DESK

The registration desk will be located in the Pre Function Area, Level 1 of the Novotel Sydney Brighton Beach.

The registration desk will be open at the following times:

Thursday, 21 August	1100–2000 hours
Friday, 22 August	0700–1730 hours
Saturday, 23 August	0800–1730 hours

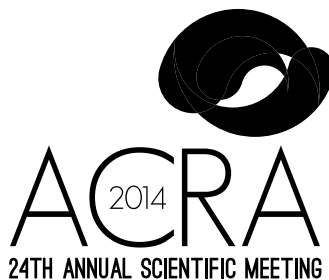
Please don't hesitate to see the staff at the registration desk should you require assistance at any time during the Meeting.

## SPEAKER PREPARATION AREA

Speakers are asked to check their audio visual material before presenting. There will be a speaker preparation area located near the registration desk. We ask that you check in with the audio visual technician at least 2 hours prior your scheduled presentation.

## SMOKING POLICY

There is a “no smoking” policy inside the Novotel Brighton Beach – smoking is only permitted in designated outside areas.



# PROGRAM

THURSDAY, 21 AUGUST 2014		
1100 – 2000	REGISTRATION OPEN	FOYER AREA
1200 – 1600	<b>BMS/Pfizer Atrial Fibrillation Workshop</b> Chair: <i>Lis Neubeck</i>  	SIRIUS 1&2
1200 – 1300	Prevention, pathophysiology and treatment: Contemporary understanding <b>Prash Sanders</b>	
1300 – 1345	<b>Lunch</b>	FOYER AREA
1345 – 1430	Controlling rate, rhythm, and coagulation <b>Sasha Bennett</b>	
1430 – 1515	Patient experiences: Case studies <b>Lis Neubeck</b>	
1515 – 1600	<b>Afternoon Tea</b>	FOYER AREA
1600 – 1730	<b>Member's Forum</b> Chair: <i>Steve Woodruffe</i> The Member's Forum is an opportunity for ACRA members to discuss the Association's activities with the Executive Management Committee	SIRIUS 1&2
1830 – 2000	<b>Welcome Reception</b>  <b>Moderated Posters</b>  Risk factors for depression following an episode of ACS: A systematic literature review <b>Jo Crittenden</b>  Identifying ACS patients at risk of depression: Preliminary development of a questionnaire for use in the acute clinical setting <b>Jo Crittenden</b>  Perceived barriers and facilitators related to screening for depression in a coronary care unit <b>Jo Crittenden</b>  Explore post CABG patient's perception on benefit of cardiothoracic home counselling <b>Sarjit Johal</b>	ENDEAVOUR 3
FRIDAY, 22 AUGUST 2014		
0630 – 0700	Walk on Brighton Beach	GROUP WILL MEET AT RECEPTION DESK
0700 – 1730	REGISTRATION OPEN	FOYER AREA
0730 – 0815	<b>Heart Foundation Breakfast Meeting: Managing Media Messages</b> Chair: <i>Julie Anne Mitchell</i> <b>Panelists: Rob Grenfell, David Sullivan, Heart Foundation Representative, Media Representative, Bob Cameron</b> 	SIRIUS 1&2
0845 – 0900	<b>Conference Open and Welcome to Country</b> Chair: <i>Steve Woodruffe</i>	ENDEAVOUR 1&2
0900 – 0910	Patient presentation: The patient experience <b>Chris Russell</b> 	
0910 – 0950	<b>National Keynote Presentation</b> Sexuality, sexual relationships and cardiovascular disease <b>Rosie King</b>	



0950 – 1035 **International Keynote Presentation**  
 Nutrition, contemporary diets and cardiovascular disease  
**Susie Burrell**

**1035 – 1100** **Morning Tea** ENDEAVOUR 3

1100 – 1215 **Research Prize Session** ENDEAVOUR 1&2

*Chair: Lis Neubeck*

1100 – 1115 Patient's perceptions of text messaging to improve secondary prevention of cardiovascular events  
**Laura de Keizer**

1115 – 1130 The experiences of patients living with Atrial Fibrillation  
**Ling Zhang**

1130 – 1145 Sensitivity and specificity of a five minute cognitive screen in heart failure patients  
**Jan Cameron**

1145 – 1200 Getting back on track after heart attack or surgery: A translational research project to support patients' emotional recovery  
**Barbara Murphy**

1200 – 1215 Discussion

**1215 – 1300** **Free Papers – Concurrent Sessions**

	<b>Heart Failure</b> <i>Chair: Nicole Lowres</i> ENDEAVOUR 1	<b>Research</b> <i>Chair: Cate Ferry</i> ENDEAVOUR 2	<b>Psychosocial</b> <i>Chair: Dawn McIvor</i> SIRIUS 1&2
1215 – 1230	Factors associated with medication adherence among heart failure patients <b>Jan Cameron</b>	Reporting and replicating cardiac rehabilitation trials: Do we know what the researchers actually did? <b>Bridget Abell</b>	Talking about sex in cardiac rehabilitation <b>Pamela Cohen</b>
1230 – 1245	Addressing health literacy and cultural teaching issues in Australian indigenous and non-indigenous heart failure patients using avatars: Technology development and pilot testing <b>Robyn Clark</b>	Screening and assessment practices in cardiac rehabilitation: A national survey of cardiac rehabilitation coordinators <b>Alun Jackson</b>	Psychometric properties of the cardiac depression scale: A systematic review (Mini Oral) <b>Chantal Ski</b>
			Assessment of lifestyle modification; Compliance with risk factor management with and without cognitive behavioural therapy (CBT) intervention of cardiac patients 6,12, and 24 months post event (Mini Oral) <b>Helen Callum</b>
			Emotional wellbeing of women post cardiac surgery (Mini Oral) <b>Margaret Flaherty</b>
1245 – 1250	Strong partnerships in health: Strengthening post-discharge management of heart failure through community-based surveillance and support (Mini Oral) <b>Andrew Maiorana</b>	Estimation of incentive spirometer before and after coronary artery bypass grafting surgery: A correlation of incentive Spirometry, lung function test and six minutes walking test in National Heart Institute, Kuala Lumpur (Mini Oral) <b>Azran Ahmad</b>	Educating for empowerment in chronic heart failure patients (Mini Oral) <b>Jan McKenzie</b>

# PROGRAM

1250 – 1255	Improving heart failure services in Victoria: A capacity-building initiative (Mini Oral) <b>Elizabeth Holloway</b>	An evaluation of incentive Spirometry in the management of pulmonary complications after CABG in National Heart Institute, Kuala Lumpur (Mini Oral) <b>Azran Ahmad</b>	Heart failure patients' self-care knowledge and self-care behaviours, impact of cognitive impairment and carer support (Mini Oral) <b>Precilla Sharp</b>
1255 – 1300	Patient satisfaction very high following cardiac rehabilitation exercise and education programs (Mini Oral) <b>Stephen Woodruffe</b>	iPhone ECG screening by practice nurses and receptionists for atrial fibrillation in general practice: The GP-SEARCH qualitative pilot study (Mini Oral) <b>Jessica Orchard</b>	Engaging consumers and stakeholders in cardiac rehabilitation advocacy (Mini Oral) <b>Shelley McRae</b>
<b>1300 – 1400</b>	<b>Lunch</b>	<b>ENDEAVOUR 3</b>	
1315 – 1400	<b>ACRA ASM AGM</b> <i>Chair: Steve Woodruffe</i>	<b>SIRIUS 1&amp;2</b>	
<b>1400 – 1515</b>	<b>Cardiovascular Disease</b> <i>Chair: Kellie Roach</i>	<b>ENDEAVOUR 1&amp;2</b>	
1400 – 1430	Chemotherapy and the Heart <b>Gemma Figtree and Claire Lawley</b>		
1430 – 1515	<b>National Keynote Presentation</b> Sexual activity and the person with disability <b>Rachel Wotton</b>		
<b>1515 – 1545</b>	<b>Afternoon Tea</b>	<b>ENDEAVOUR 3</b>	
<b>1545 – 1715</b>	<b>Concurrent Workshops</b>		
	<b>Cardiac Rehab 101: Introduction to Exercise Prescription for CR</b> <i>Chair: Craig Cheetham</i> <b>ENDEAVOUR 1</b>	<b>Technology &amp; Innovation</b> <i>Chair: Lis Neubeck</i> <b>ENDEAVOUR 2</b>	<b>Sex, Cardiovascular Disease, and Co-Morbidities</b> <i>Chair: Dawn McIvor</i> <b>SIRIUS 1&amp;2</b>
	Introducing physical activity <b>Steve Woodruffe</b>	Alivacor IECG Screening <b>Nicole Lowres</b> Remote telemonitoring HF <b>Liz Halcomb</b> Text ME <b>Laura de Keizer</b> Heart online <b>Annabelle Hickey</b>	Men's health and erectile dysfunction <b>Bill Lynch</b> Sexual activity, how can we help? <b>Rachel Wotton</b>
<b>1900 – 2300</b>	<b>Gala Dinner – Rock 'n' Roll Theme</b> <i>(Please wear your best rock 'n' roll outfit; prizes will be awarded for best dressed!)</i>	<b>ENDEAVOUR 1&amp;2</b>	

## SATURDAY, 23 AUGUST 2014

0800 – 1730	REGISTRATION OPEN		FOYER AREA
<b>0900 – 1025</b>	<b>Contemporary Considerations in Cardiac Rehabilitation</b> <i>Chair: Julie Anne Mitchell</i>		ENDEAVOUR 1&2
0900 – 0940	<b>National Keynote Presentation</b> Caffeine, drugs and the heart <b>Chris Semsarian</b>		
0940 – 1025	<b>International Keynote Presentation</b> Non-invasive measures of cardiovascular disease <b>Lee Stoner</b>		
<b>1025 – 1100</b>	<b>Morning Tea</b>		ENDEAVOUR 3
1100 – 1215	<b>Clinical Prize Session</b> <i>Chair: Robyn Gallagher</i>		ENDEAVOUR 1&2
1100 – 1115	Optimising the resources “What’s wrong with my heart” DVD during a hospital admission in a centre with comprehensive cardiac rehabilitation and prevention services <b>Tracy Swanson</b>		
1115 – 1130	Promoting quality use of medicines for acute coronary syndrome and heart failure patients <b>Sasha Bennett</b>		
1130 – 1145	Prevalence of sexual activity in a cardiac rehabilitation population: A twelve month natural history study <b>Christina Thompson</b>		
1145 – 1200	Feasibility of implementing a mobile health home-based cardiac rehabilitation program <b>Marlien Varnfield</b>		
1200 – 1215	Discussion		
<b>1215 – 1300</b>	<b>Free Papers – Concurrent Sessions</b>		
	<b>Physical Activity</b> <i>Chair: Craig Cheetham</i> ENDEAVOUR 1	<b>Nutrition</b> <i>Chair: Ritin Fernandez</i> ENDEAVOUR 2	<b>Service Delivery</b> <i>Chair: Robyn Clark</i> SIRIUS 1&2
1215 – 1230	Evaluating the effect age and gender has on the ability to improve functional capacity using 6MWT as measure <b>Debora Snow &amp; Kathy O'Donnell</b>	Can families improve their diet quality when trying to reduce their CVD risk? <b>Tracy Schumacher</b>	Contemporary in-hospital Atrial Fibrillation: Who gets guideline-based therapy? <b>Kellie Roach</b>
1230 – 1245	Reducing mortality with exercise-based cardiac rehabilitation: Is it what patients do or how well they stick with it? <b>Bridget Abell</b>	“I know what I’m supposed to eat but...”: What families participating in a CVD risk reduction diet study think about eating the ‘right’ food for heart health (Mini Oral) <b>Tracy Schumacher</b>	Cardiac rehabilitation service redesign to address the challenges of a changing health environment <b>Andrew Maiorana</b>
		Integrated care through service redesign: Creating opportunities for capacity and disinvestment (Mini Oral) <b>Glenn Paul</b>	
		How Expert Nurse Review Impacts on Cardiac Rehabilitation Patient Outcomes (Mini Oral) <b>Janice Smith</b>	

# PROGRAM

1245 – 1250	Effect of early exercise engagement on arterial stiffness in patients diagnosed with a transient ischemic attack: Efficacy of implementing a cardiac rehabilitation exercise program <b>James Faulkner</b>		A new cardiac rehabilitation needs assessment tool (CRNAT) to support clinical service redesign (Mini Oral) <b>Julie Smith</b>
1250 – 1255			Cardiac rehabilitation programs, a closer look: A national survey of cardiac rehabilitation coordinators (Mini Oral) <b>Rosemary Higgins</b>
1255 – 1300			Cardiac rehabilitation decreases the risk of hospital readmission: Improvement in harp chronic condition risk calculator score post completion of cardiac rehabilitation (Mini Oral) <b>Melanie McAndrew</b>
<b>1300 – 1400</b>	<b>Lunch</b>		<b>ENDEAVOUR 3</b>
<b>1315 – 1400</b>	<b>CRA NSW AGM</b>		<b>SIRIUS 1&amp;2</b>
<b>1400 – 1530</b>	<b>Concurrent Workshops</b>		
	<b>Cardiac rehabilitation: Advanced exercise prescription from the frail to the fit</b> <i>Chair: Steve Woodruffe</i> <b>Craig Cheetham</b> <i>ENDEAVOUR 1</i>	<b>Cultural Issues/Safety</b> <i>Chair: Lee Stoner</i> <b>Lee Stoner</b> <i>ENDEAVOUR 2</i>	<b>Mixing it up: Incorporating Tai Chi moves into cardiac rehabilitation</b> <i>Chair: Dawn McIvor</i> <b>Paul Lam</b> <i>SIRIUS 1&amp;2</i>
<b>1530 – 1600</b>	<b>Afternoon Tea</b>		<b>ENDEAVOUR 3</b>
1600 – 1640	The great debate: Rehab for Homer Simpson Home tele-health versus traditional outpatient <i>Chair: Lis Neubeck</i> Home tele-health: <b>Steve Woodruffe and Robyn Gallagher</b> Traditional outpatient: <b>Tom Briffa and Dawn McIvor</b>		<b>ENDEAVOUR 1&amp;2</b>
1640 – 1650	ACRA 2015 Presentation		
<b>1650 – 1700</b>	<b>Conference close and announcement of awards</b> <i>Chair: Steve Woodruffe</i> Best Poster Award Best New Research Award ( <i>Sponsored by the Heart Research Centre</i> ) Best Clinical Presentation Award Best Exercise and Physical Activity Paper Award People's Choice Award		
1700 – 1710	Final word from a CR patient: Patient reflection <b>Tanya Hall</b>		

# TRADE DISPLAY AND POSTER AREA

The industry trade display will be open for the duration of the Meeting and will become a hub for delegates. The trade display and poster area will be located on Level 1 in Endeavour 3 and foyer area.

Table #	Organisation
5	Aspen Australia
3	AstraZeneca
4	AtCor Medical
1	Boehringer Ingelheim
2	Menarini
7	Pfizer
6	Zoll Medical

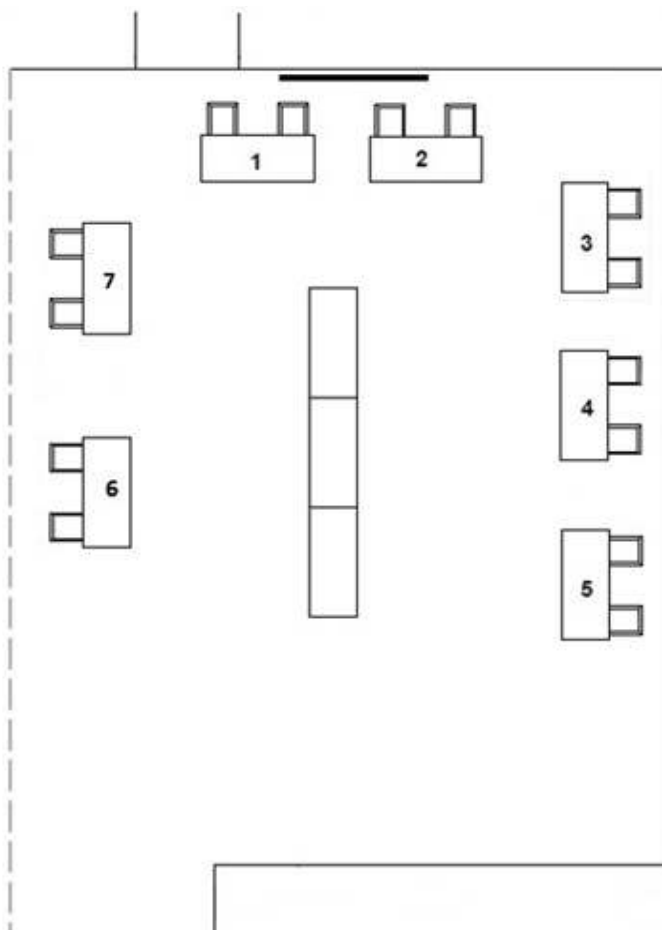
## OPENING HOURS

**Friday, 22 August 2014**

1030 – 1730 hours

**Saturday, 23 August 2014**

0800 – 1600 hours



## MODERATED POSTERS

1. Risk factors for depression following an episode of acs: a systematic literature review  
**Jo Crittenden**
2. Identifying acs patients at risk of depression: preliminary development of a questionnaire for use in the acute clinical setting  
**Jo Crittenden**
3. Perceived barriers and facilitators related to screening for depression in a coronary care unit  
**Jo Crittenden**
4. Explore post cabg patient's perception on benefit of cardiothoracic home counselling  
**Sarjit Johal**

## STATIC POSTERS

5. Screening, referral and treatment for depression in patients with coronary heart disease poster  
**Stephen Bunker**
6. Effective use of secondary prevention data poster  
**Karice Hyun**
7. What education is provided to the heart failure patient in the rural setting: a systematic review  
**Jo Leonard**
8. Importance of regular post-assessment in a new heart failure rehabilitation course  
**Tarryn Mair**
9. The 6 minute walk test in cardiac rehabilitation and differences between surgical and non-surgical populations  
**Caitlin Patat**
10. The courage and conviction of becoming a nurse practitioner: navigating the rigours of the nurse practitioner candidacy in the modern world of nursing  
**Margaret Ryan**

# SPONSOR & EXHIBITOR PROFILES



**Company:** AstraZeneca  
**Table #:** 3  
**Contact:** Liz Mackenzie  
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AstraZeneca Australia, based in North Ryde, is engaged in the research, development, manufacture and supply of medicines that aim to make a real difference to the lives of Australians.

Our primary focus is on three important areas of healthcare: Cardiovascular and Metabolic disease; Oncology; and Respiratory, Inflammation and Autoimmunity. We are also active in Infection, Neuroscience and Gastrointestinal disease areas.



**Company:** Boehringer Ingelheim  
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At Boehringer Ingelheim our purpose is simply to 'Make More Health' - for patients, our people and our community. For over a century we have remained a family-owned, independent pharmaceutical company and today operate in over 50 countries with more than 47,400 employees.



**Company:** Heart Foundation  
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**Website:** [www.heartfoundation.org.au](http://www.heartfoundation.org.au)

The Heart Foundation is Australia's leading heart health charity dedicated to reducing the number of Australians living with, or dying from cardiovascular disease. The Heart Foundation funds vital research, develops guidelines for health professionals, supports patients through their post-event journey and helps Australians lead healthier lifestyles. We are an evidence-based organisation that has played a pivotal role in major advances in the prevention, diagnosis and treatment of cardiovascular disease since our inception in 1959.



**Company:** Menarini  
**Table #:** 2  
**Contact:** Michael O'Connor  
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**Website:** [www.menariniapac.com.au](http://www.menariniapac.com.au)

A member of the Menarini Group, a leading European biopharmaceutical company, Menarini Australia focuses on delivering differentiated ethical and consumer healthcare brands to Australians. With an extensive portfolio, Menarini Australia markets a wide range of pharmaceutical, biotechnology and consumer health brands. Building on our strengths in dermatology, primary care, consumer health and specialty care, Menarini Australia is introducing new products in men's sexual health, cardiovascular and respiratory therapeutic areas. For further information please visit [www.menarini.com.au](http://www.menarini.com.au)



**Company:** Pfizer  
**Table #:** 7  
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In 2007, Pfizer and Bristol-Myers Squibb entered into a worldwide collaboration to develop and commercialize ELIQUIS, an investigational oral anticoagulant discovered by Bristol-Myers Squibb. This global alliance combines Bristol-Myers Squibb's long-standing strengths in cardiovascular drug development and commercialization with Pfizer's global scale and expertise in this field.





**Company:** Heart Research Centre  
**Contact:** Elizabeth Holloway  
**Address:** Level 3, 80 William Street, East Sydney NSW, Australia  
**Telephone number:** +61 3 9326 8544  
**Email address:** elizabeth.holloway@heartresearchcentre.org  
**Website:** www.heartresearchcentre.org



Heart  
Research  
Australia

**Company:** Heart Research Australia *"Join our fight against heart disease"*  
**Telephone number:** +61 2 9436 0056  
**Email address:** enquiries@heartresearch.com.au  
**Website:** www.heartresearch.com.au

Heart Research Australia raises funds for research into the detection, treatment and prevention of heart disease and associated medical conditions.

Our goal is to reduce the devastating impact the disease has on the community.



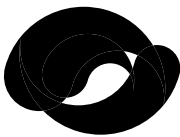
**Company:** Aspen Australia  
**Table #:** 5  
**Contact:** Peter Penn  
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**Email address:** peter.penn@aspenpharmacare.com.au  
**Website:** www.aspenpharmacare.com.au



**Company:** AtCor Medical  
**Table #:** 4  
**Contact:** Mark Harding  
**Address:** Suite 11, 1059-1063 Victoria Road, NSW, Australia  
**Telephone number:** +61 2 8815 8814  
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# ORAL ABSTRACTS



ACRA  
2014  
24TH ANNUAL SCIENTIFIC MEETING

<b>Day:</b>	<b>Thursday, 21 August 2014</b>
<b>Session:</b>	<b>BMS/Pfizer Atrial Fibrillation Workshop</b>
<b>Room:</b>	<b>Level 1, Sirius 1&amp;2</b>
<b>Time:</b>	<b>1200 – 1600 hours</b>

This workshop is designed to assist health professionals working in cardiology and cardiac rehabilitation and areas to manage the care of people who have atrial fibrillation (AF). There are many challenges to providing this care and these challenges include a rapid increase in prevalence of AF associated with an aging population, regular updates in international guidelines for care but lack of local guidelines and ongoing changes in the availability of medications including stroke prevention medications. One of the most important challenges, however, is that AF is merely an inconvenience and not a serious health problem potentially resulting in stroke, loss of function and increased anxiety.

The aims of this workshop are:

1. To improve knowledge and understanding of the aetiology and epidemiology of AF, potential complications and contemporary treatment options;
2. To identify key elements of contemporary national and international guidelines for the stratification of risk and treatment of patients who have AF;
3. To develop an understanding of the impact of AF, treatment and self-care requirements on patients in terms of symptoms, functional status and quality of life; and
4. To develop insight into the preparation and implementation of patient care plans that optimise the management of AF and address issues arising in the translation of guidelines into practice.

Workshop content will include the aetiology and epidemiology of AF, potential complications, signs and symptoms, contemporary treatment options (pharmaceutical, surgical and lifestyle), national and international guidelines for rate and rhythm control, the stratification of risk of stroke and bleeding and anticoagulant guidelines, follow-up and surveillance for treatments, impact of AF on function and quality of life, self-care requirements, secondary risk factor prevention and exercise in AF. The workshop will be delivered via lectures and interactive patient case studies. Evaluation of the workshop will occur at the conclusion, and we will also send out a questionnaire in October to assess longer-term outcomes.

**Day:** Thursday, 21 August 2014  
**Session:** BMS/Pfizer Atrial Fibrillation Workshop  
**Room:** Level 1, Sirius 1&2  
**Time:** 1200 – 1300 hours

## **PREVENTION, PATHOPHYSIOLOGY AND TREATMENT: CONTEMPORARY UNDERSTANDING**

Prash Sanders

*Professor, Heart Rhythm Disorders, Atrial Fibrillation & Sudden Cardiac Death, UofA Royal Adelaide Hospital, SA, Australia*

Atrial fibrillation (AF) is rapidly overtaking other cardiovascular conditions as the leading cause of rehospitalisation and rates are predicted to increase exponentially. New treatments and an increased awareness of AF as a lifestyle disease, has made cardiac rehabilitation a highly appropriate place for management of people with AF. This interactive workshop will focus on the emerging evidence for management of AF.

**Day:** Thursday, 21 August 2014  
**Session:** BMS/Pfizer Atrial Fibrillation Workshop  
**Room:** Level 1, Sirius 1&2  
**Time:** 1345 – 1430 hours

## **CONTROLLING RATE, RHYTHM, AND COAGULATION**

Sasha Bennett

*Executive officer, NSW Therapeutic Advisory Group, Darlinghurst, NSW, Australia*

A practical update of medicines used in the management of atrial fibrillation will be given including the use of the new oral anticoagulants. Is the hype about them true? What are the pitfalls in their use? When can patient resources be found? Real life cases will be used to illustrate the use of these and other medicines in the AF patient.

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Heart Foundation Breakfast Meeting</b>
<b>Room:</b>	<b>Level 1, Sirius 1&amp;2</b>
<b>Time:</b>	<b>0730 – 0815 hours</b>

### **MANAGING MEDIA MESSAGES**

How do health professionals, cardiac patients and the general community remain well-informed of new cardiac research and handle sensational coverage on radio or in the press?

A panel discussion will review how cardiovascular disease is depicted in the media. This will be explored from a number of angles including the views of a cardiologist, a Heart Foundation spokesperson, a journalist, a consumer and a media manager.

**Day:** Friday, 22 August 2014  
**Session:** Opening Plenary  
**Room:** Level 1, Endeavour 1&2  
**Time:** 0900 – 0910 hours

## **PATIENT PRESENTATION: THE PATIENT EXPERIENCE**

Chris Russell

*Ambassador, Heart Research Australia, St Leonards, NSW, Australia*Position

If I was going to fall into some cold water and have a heart attack – it was good that it happened after April 2004. That was the date of the launch of ETAMI (Early Triage of Acute Myocardial Infarction) into a few Sydney ambulances linked to Royal North Shore hospital and funded by The North Shore Heart Research Foundation (now Heart Research Australia) – a fortunate launch for me or I would not be here today.

My Main Right Coronary Artery was completely blocked but no problem for Dr Michael Ward and his team who had the “SALAMI\*” procedure finished and full blood flow restored at least an hour earlier than would have been the case before ETAMI.

\* SALAMI – Stenting as an Alternative to Lytic Therapy in Acute Myocardial Infarction

I had never smoked, a keen fit Rugby and Squash Player, served in the Army reserve as an Infantry platoon commander and trained with 1 Commando Company. Indeed, until 16th May 2004 and at 52 years of age – I had no sense of my own mortality at all.

However suddenly, after May 16, I had to come up with the “B” version of the SALAMI acronym – “Stay Alive Longer After Myocardial Infarct” (and “B” version - “Buy a Boat” to reduce blood pressure!). Surely a mission statement for cardiac rehabilitation!

The interventional Cardiologists had done their job on the plumbing and mechanics – but the big picture is what to do to excite, prolong and enhance that gift of life they had given me.

How was I going to ensure I could do all those things that I needed to get finished and didn't then know I was going to have the opportunity for - enthusiastically and effectively? The Cardiac Rehab team were an indispensable part of my support team. They put the “Quality” back into “Quality of Life”.

Awesome People...Awesome job....Awesome results.

**Day:** Friday, 22 August 2014  
**Session:** Opening Plenary – National Keynote Presentation  
**Room:** Level 1, Endeavour 1&2  
**Time:** 0910 – 0950 hours

## **SEXUALITY, SEXUAL RELATIONSHIPS AND CARDIOVASCULAR DISEASE**

Rosie King

*Lecturer, University of New South Wales, Randwick, NSW, Australia*

There is a particularly strong link between erectile dysfunction and cardiovascular disease. In many cases they share a common cause – endothelial dysfunction. Erectile dysfunction (ED) can be an early warning sign of cardiovascular disease. It is thought that ED precedes a cardiovascular (CV) event by about 3 years. Asking about ED gives the physician the opportunity to aggressively intervene and modify lifestyle habits to reduce the risk of CV event.

Although important, sex can be a difficult topic for doctors to raise with their patients. A helpful approach is to make a generalising or normalising statement that links the patient's health status with erectile dysfunction. This is followed by an open question. The treatment of ED is straightforward and definitely in the province of most physicians.

After a cardiac insult a common question is when can we resume sexual activity? Fears of a further CV event during sex are common leading many couples to cease sexual activity altogether. A man can be considered fit enough to resume sexual activity when he can walk 1 km on the flat in 15 minutes and then climb 2 flights of steps within 10 secs without any chest pain or undue breathlessness. Suggestions for resuming sex include avoiding sex after large meal, after heavy alcohol intake or in the early hours of the morning. Have sex in a familiar place with a familiar partner in a comfortable position. The partner should take a more active role. Keep GTN spray or tablets where you can reach them should chest pain occur.



**Day:** Friday, 22 August 2014  
**Session:** Opening Plenary – International Keynote Presentation  
**Room:** Level 1, Endeavour 1&2  
**Time:** 0950 – 1035 hours

## **NUTRITION, CONTEMPORARY DIETS AND CARDIOVASCULAR DISEASE**

Susie Burrell

*Dietician, Clinical Practice, Sydney, NSW, Australia*

The current trends in nutrition – can they apply to cardiac rehab?

Nutritional intervention is well documented as a significant factor influencing cardiac outcomes. While there are traditional dietary approaches known to positively effect outcomes such as a modified fat, high fibre diet, currently there are a number of topical and even controversial dietary approaches frequently discussed by professionals and patients alike. This presentation will outline and discuss the traditional dietary prescription for cardiac patients and also specifically examine current areas of dietary interested including low sugar and Paleo diets and their possible application with patients with heart disease and heart disease risk factors.

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Research Prize Session</b>
<b>Room:</b>	<b>Level 1, Endeavour 1&amp;2</b>
<b>Time:</b>	<b>1100 – 1115 hours</b>

## **PATIENT'S PERCEPTIONS OF TEXT MESSAGING TO IMPROVE SECONDARY PREVENTION OF CARDIOVASCULAR EVENTS**

Karla R E Santo<sup>1</sup>, Julie Redfern<sup>1,2</sup>, Jay Thakkar<sup>2,3</sup>, [Laura de Keizer](#)<sup>1,2,3</sup>, Aravinda Thiagalingam<sup>3</sup>, Tony Barry<sup>3</sup>, Clara Chow<sup>1,2,3</sup>

1. *The George Institute for Global Health, Sydney, NSW, Australia*

2. *University of Sydney, Sydney, NSW, Australia*

3. *Westmead Hospital, Sydney, NSW, Australia*

**Introduction:** Mobile phone text messaging may be an effective way of motivating lifestyle changes for patients who survive cardiovascular events. We aimed to evaluate patient's perceptions of a text message-based intervention for improving secondary prevention.

**Methods:** The TEXT ME Study, a randomised control trial enrolling patients with coronary disease involves sending four text messages per week for 6 months. Topics include diet, physical activity, medications and smoking cessation (if relevant). The messages are sent on random weekdays, at random times during working hours. At the end of the program, participants completed an 18-item survey that evaluated usefulness, content and program delivery.

**Results:** 196 surveys were analysed (response rate 89%). Mean age of participants was 58 ± 9 years, 88% were male. As a result of the program, 84% reported they had taken on a healthier diet, 80% reported increasing physical activity and 81% reminded to take medications. Overall, 83% of participants agreed the text messages motivated them to change their lifestyle. Messages were rated as easy to understand by 98% and useful by 93%. The program length of 6 months was rated as appropriate by 78%, with 4% requesting longer duration. The message frequency was rated as appropriate by 84%, with 10% requesting more messages per week. The majority of participants (94%) read more than three-quarters of the text messages and shared them with friends and family (59%).

**Conclusion:** Text message based interventions show great potential with high user acceptance and perceived effects.

**Day:** Friday, 22 August 2014  
**Session:** Research Prize Session  
**Room:** Level 1, Endeavour 1&2  
**Time:** 1115 – 1130 hours

## THE EXPERIENCES OF PATIENTS LIVING WITH ATRIAL FIBRILLATION

Ling Zhang, Lis Neubeck, Robyn Gallagher  
*University of Sydney, Camperdown, NSW, Australia*

**Background:** Atrial fibrillation (AF) is associated with serious health consequences such as strokes, high rates of morbidity and mortality, as well as poor health related quality of life (HRQoL). This study set out to describe patient's experience of living with AF to provide a foundation to improve HRQoL.

**Methods:** Qualitative interviews of AF patients (n = 11) who had completed the CHOICE-AF study were conducted using a 'think aloud' technique with questions guided by the Atrial Fibrillation Effects On Quality Of Life Questionnaire (AFEQT) and the SF-12. Data analysis was guided by grounded theory principles.

**Results:** The sample had a mean age of 66 years and included 4 women and 8 men. Four related themes were identified related to experiences of living with AF and HRQoL. Themes included (1) the impact of AF symptoms and treatments on HRQoL, (2) loss of function or independence, (3) approach to life including acceptance of AF, social support, and knowledge, and (4) the influence of age on all three themes. The unpredictable nature of AF symptoms and side effects and concerns related to treatments were major contributors to a loss of function, as well as poorer HRQoL. Acceptance of AF, social support, and adequate knowledge and understanding of AF and treatment were identified as protective factors.

**Conclusion:** AF occurs adds an additional layer of requirements for self-management onto existing self-care. There is a need to provide additional support to AF patients.

**Day:** Friday, 22 August 2014  
**Session:** Research Prize Session  
**Room:** Level 1, Endeavour 1&2  
**Time:** 1130 – 1145 hours

## **SENSITIVITY AND SPECIFICITY OF A FIVE MINUTE COGNITIVE SCREEN IN HEART FAILURE PATIENTS**

Jan Cameron<sup>1</sup>, Robyn Gallagher<sup>2</sup>, Susan J Pressler<sup>3</sup>, Chantal F Ski<sup>1</sup>, Anne Sullivan<sup>4</sup>, Rhonda J Burke<sup>4</sup>, Susan Hales<sup>4</sup>, Geoff Tofler<sup>4</sup>, David R Thompson<sup>1</sup>

1. Australian Catholic University, East Melbourne, VIC, Australia
2. Charles Perkins Centre, University of Sydney, Sydney
3. School of Nursing, Ann Arbor, University of Michigan, Michigan, United States
4. Royal North Shore MACARF program, Royal North Shore Hospital, Sydney

**Introduction:** Up to 75% of heart failure (HF) patients exhibit cognitive dysfunction on screening.

**Objective:** To examine whether three items from the Montreal Cognitive Assessment (MoCA) have adequate sensitivity (>85%) and specificity ( $\geq 70\%$ ) to be recommended as a five minute cognitive screen in HF patients.

**Methods:** The MoCA was administered to HF patients (n=221) enrolled in one disease management program in Sydney, and one in Melbourne. The five minute screen uses three MoCA items (verbal fluency, delayed recall and orientation) with possible scores of 1 to 12 (lower scores indicate poorer cognitive function). Receiver operator characteristics (ROC) were constructed with MoCA <26 as the positive test, to determine the sensitivity and specificity and appropriate cut-score of the five minute cognitive screen.

**Results:** In the elderly sample (M=76 years, SD=12.3) of predominately male (66%) HF patients, 134 (61%) were identified as having possible cognitive dysfunction. Actual scores on the five minute screen ranged from 3 to 11 ( $\bar{x}$  8.56, SD 1.8) and as expected were strongly correlated with overall MoCA score ( $r=0.72$ ,  $p<0.001$ ) and MoCA cut-off score <26 ( $r=0.63$ ,  $p<0.01$ ). A cut-off score  $\leq 9$  on the 5-minute cognitive screen provided 89% sensitivity and 70% specificity, and the area under the ROC curve was good (0.88,  $p<0.01$ , 95% CI 0.83 to 0.92).

**Conclusion:** Using a cut-off score  $\leq 9$ , the three recommended items from the MoCA (verbal fluency, delayed recall and orientation) had adequate sensitivity and specificity to be used as a five minute screen to detect possible cognitive dysfunction in HF patients.

**Day:** Friday, 22 August 2014  
**Session:** Research Prize Session  
**Room:** Level 1, Endeavour 1&2  
**Time:** 1145 – 1200 hours

## **GETTING BACK ON TRACK AFTER HEART ATTACK OR SURGERY: A TRANSLATIONAL RESEARCH PROJECT TO SUPPORT PATIENTS' EMOTIONAL RECOVERY**

Barbara Murphy<sup>1</sup>, Rosemary Higgins<sup>1</sup>, Elizabeth Holloway<sup>1</sup>, Karen Page<sup>2</sup>, Alun Jackson<sup>1</sup>

1. Heart Research Centre, Royal Melbourne Hospital, VIC, Australia

2. National Heart Foundation, Australia

**Introduction:** Our previous research has shown that most patients are unprepared for the psychological changes that typically follow a cardiac event and want information regarding emotional recovery. Many patients report elevated distress at the time of their event. While for most this ameliorates over time, some patients are at risk of ongoing or worsening symptoms. In light of the paucity of information on emotional recovery and patients' expressed needs, we aimed to develop and evaluate patient and health professional resources to support emotional recovery after a cardiac event.

**Methods:** An audit of cardiac patient resources at 19 Victorian hospitals was conducted to confirm that no suitable resources existed. Two patient brochures and an online health professional training program were developed, both informed by our previous research. The resources were evaluated using qualitative and quantitative approaches, including investigation of satisfaction with resources and, for health professionals, self-efficacy in supporting patients' emotional adjustment.

**Results:** The patient resources were reviewed by 33 patients and 2 partners. Findings indicated a high level of acceptability of the resources. The online training was trialled by 42 health professionals. Again findings indicated a high level of acceptability. Health professionals' self-efficacy in supporting patient adjustment significantly increased after undertaking the training ( $p < .001$ )

**Conclusion:** A translational research approach was used to increase support available for patients. The resources will be disseminated to cardiac rehabilitation programs, coronary care units and cardiothoracic wards across Australia by mid 2014.

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Heart Failure</b>
<b>Room:</b>	<b>Level 1, Endeavour 1</b>
<b>Time:</b>	<b>1215 – 1230 hours</b>

## **FACTORS ASSOCIATED WITH MEDICATION ADHERENCE AMONG HEART FAILURE PATIENTS**

Jan Cameron, Tina Habota, Chantal F Ski, Skye N McLennan, Peter G Rendell, David R Thompson

*Australian Catholic University, East Melbourne, VIC, Australia*

**Introduction:** Medication adherence is often poor among heart failure (HF) patients. Many factors are associated with this. The Medication Adherence Scale (MAS) has not previously been used in the Australian context, examining barriers that help explain this health outcome.

**Aim:** To provide preliminary analysis of the three MAS scales (knowledge, attitudes and barriers) and psychosocial factors associated with better adherence.

**Methods:** The MAS was administered to HF patients enrolled in a nurse-led disease management program (n=42, mean age 71, SD=11 years, 71% males) in Melbourne. Higher scores on the three domains of MAS: knowledge (0-30), attitudes (0-40) and barrier scores (0-110) indicate, better knowledge, more positive attitudes and more barriers. Psychosocial variables associated with medication adherence were examined via correlations with tools measuring quality of life (SF-12), anxiety and depression (HADS), physical, cognitive and emotional functioning (Heart-FaST), cognitive screening (ACE-R), self-care heart failure index (SCHFI) and social support.

**Results:** Patients were taking 12 (SD=5) medications per day. Self-reported medication knowledge (M=21, SD=6) and attitude scales (M=27, SD=4) were high, barrier scales (M=17, SD=22) were low. Medication knowledge had moderate-to-high correlations with self-care maintenance ( $r=0.43$ ,  $p=0.03$ ), management ( $r=0.49$ ,  $p=0.02$ ) and ACE-R ( $r=0.65$ ,  $p<0.01$ ). Medication attitudes moderately correlated with self-care management ( $r=0.59$ ,  $p<0.01$ ) and confidence scales ( $r=0.51$ ,  $p<0.01$ ). Other psychosocial factors assessed were not significantly associated with the MAS.

**Conclusion:** Poor medication adherence was associated with poorer cognitive functioning and patient knowledge of HF self-care. The MAS may assist clinicians identify vulnerable patients who require increased vigilance with medication adherence.

**Day:** Friday, 22 August 2014  
**Session:** Concurrent Free Paper Sessions – Heart Failure  
**Room:** Level 1, Endeavour 1  
**Time:** 1230 – 1245 hours

## **ADDRESSING HEALTH LITERACY AND CULTURAL TEACHING ISSUES IN AUSTRALIAN INDIGENOUS AND NON-INDIGENOUS HEART FAILURE PATIENTS USING AVATARS: TECHNOLOGY DEVELOPMENT AND PILOT TESTING**

Robyn A Clark<sup>1</sup>, Bronwyn Fredericks<sup>2</sup>, Mick Adams<sup>3</sup>, John Atherton<sup>4</sup>, Jill Howie-Esquivel<sup>5</sup>, Kathy Dracup<sup>5</sup>, Natahlia Buitendyk<sup>4</sup>

1. Flinders University, Adelaide, SA, Australia
2. Indigenous Engagement, CQU, Rockhampton
3. Health Sciences, Queensland University of Technology, Kelvin Grove
4. Cardiology, University of Queensland, Brisbane
5. School of Nursing, University of California San Francisco, San Francisco

**Background/Aims:** No IT supported heart failure (HF) self-care intervention has been developed specifically for the Australian Indigenous population. Around the world more self-care teaching and learning resources are needed that are both culturally appropriate and/or tailored for patients with low health literacy skills. We have been developing and testing mobile teaching apps using avatars to begin to address these issues.

**Methods:** For IT development of both Indigenous and Non-indigenous versions of the app, action research cycles that involved redevelopment based on feedback from a heart failure expert panel and heart failure patients (consumer feedback) were conducted. Pre-test/post-test design was used to assess changes in HF knowledge (HF Knowledge Questionnaire) and self-care behaviours (SCHFI). Satisfaction with learning via the Avatar apps was also evaluated.

**Results:** Non-Indigenous participants (n=18) patients' knowledge improved using the app (mean pre-test score 14.00±3.08 vs. post-test score 15.40±0.89). Self-care behaviours improved in all domains. 75.64% of the HF patients were satisfied with receiving education via the web-based application.

In the group of 10 Australian Indigenous participants (mean age 61.6 years, with NYHA Class III and IV) HF improved knowledge by 13%, self-care by 3.26% ±18.36 and confidence by 24.29% ±20.73 p=0.05. Participants expressed a high level of satisfaction with the resources (85.1%) and intended to weigh themselves daily following education.

**Conclusion:** Our extensive pilot studies have guided the design of 2 large intervention studies in Indigenous and Non-indigenous Australian Heart Failure patients and two further studies progressing in Maori and Hispanic populations.

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<b>Room:</b>	<b>Level 1, Endeavour 1</b>
<b>Time:</b>	<b>1245 – 1250 hours (Mini Oral)</b>

## **STRONG PARTNERSHIPS IN HEALTH: STRENGTHENING POST-DISCHARGE MANAGEMENT OF HEART FAILURE THROUGH COMMUNITY-BASED SURVEILLANCE AND SUPPORT**

Andrew Maiorana<sup>1, 2, 3</sup>, Helen McLean<sup>4</sup>, Agnes McGinty<sup>4</sup>, Tim Newing<sup>5</sup>, Jille Burns<sup>3</sup>, Helen Hayes<sup>1</sup>, Niki Parle<sup>1</sup>, Julie Barber<sup>6</sup>, Charlotte Lewis<sup>4</sup>, Carolyn Lawrence<sup>3</sup>, Jacque Garton-Smith<sup>7</sup>

1. *Adanced Heart Failure and Cardiac Transplant Service , Royal Perth Hospital, Perth, WA, Australia*
2. *Curtin University, Perth, WA, Australia*
3. *SmartHeart , Curtin University, Bentley, WA, Australia*
4. *Cardiology Department, Royal Perth Hospital, Perth, WA, Australia*
5. *Physiotherapy, Fremantle Hospital, Fremantle, WA, Australia*
6. *Advanced Heart Failure and Cardiac Transplant Service, Royal Perth Hospital, Perth, WA, Australia*
7. *Cardiovascular Health Network , Department of Health, WA, Perth, WA, Australia*

**Background:** Heart failure (HF) results in high utilisation of health resources, with hospital admissions being the greatest contributor. With improved post-discharge support, many readmissions may be preventable.

**Aim:** To establish a community-based service for patients following a hospital admission for HF through the establishment of a partnership between the WA Health Department and community organisations.

**Methods:** The South Metropolitan Health Service convened a steering group of clinicians from Royal Perth, Rockingham and Fremantle sites to design an integrated service model (SmartHeart) linking patients with HF to specialist nurse support in primary care, the first of its kind in WA. Case Finders were appointed at Royal Perth and Fremantle Hospitals to identify and refer appropriate patients.

Curtin University was contracted to deliver nurse-led care management through a clinic, phone follow-up and home visits. To improve accessibility, outreach clinics and a mobile health service were established. Enrolled patients received HF management education, a HF action plan (for early identification and treatment of clinical deterioration) and a care management plan. Supervised exercise was offered at Curtin University and through Community Physiotherapy Services. Patients' GPs were engaged throughout.

**Outcomes:** During the first 12 months of the program 387 patients were referred to SmartHeart. Patients engaged reported reduced anxiety and improved capacity to manage their condition.

**Implications for practice:** This model could readily be applied in other locations and for other chronic conditions.

**Conclusions:** The SmartHeart model provides an example of how collaboration across an Area Health Service, and with community partners, can facilitate HF management in primary care.



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<b>Time:</b>	<b>1250 – 1255 hours (Mini Oral)</b>

### **IMPROVING HEART FAILURE SERVICES IN VICTORIA: A CAPACITY-BUILDING INITIATIVE**

Elizabeth Holloway<sup>1</sup>, Rosemary Higgins<sup>1</sup>, Andrea Driscoll<sup>2</sup>, Henry Krum<sup>3</sup>, Alun Jackson<sup>1</sup>

1. Heart Research Centre, The Royal Melbourne Hospital, VIC, Australia
2. Deakin University, Melbourne, Vic, Australia
3. Monash University, Melbourne, Vic, Australia

**Introduction:** Health professional training is a vital component of quality care in heart failure rehabilitation. However, there are many barriers to training access and attendance particularly amongst health professionals in regional and rural areas. With assistance from the State Government, this project provided scholarship funding for 10 health professionals to attend the Heart Research Centre heart failure training program.

**Method:** Applications were sought via a state wide mailout from health professionals working with chronic heart failure patients in under-resourced areas. Thirty seven applications were received. The selection process involved an expert panel who ranked applications against set criteria. Participants completed online surveys pre- and post-training, and again at four months.

**Results:** Post-program evaluation demonstrated significant improvement in health professional self-efficacy to deliver a heart failure rehabilitation program ( $p < .01$ ). Participants reported a range of practice improvements that they intended to implement. Outcomes four months after the training, including actual practice change, are currently being analysed and will also be reported.

**Conclusion:** The provision of scholarships has improved access to training and therefore quality of CHF services. It is hoped that this initiative will receive continued government support.

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<b>Time:</b>	<b>1255 – 1300 hours (Mini Oral)</b>

## **PATIENT SATISFACTION VERY HIGH FOLLOWING CARDIAC REHABILITATION EXERCISE AND EDUCATION PROGRAMS**

Stephen Woodruffe, Robyn Williams, Steve Bartlett, Jillian Grice, Melanie McAndrew, Kate Kovacs

*West Moreton Hospital and Health Service, Ipswich, QLD, Australia*

**Aim:** To evaluate the satisfaction of Cardiac Rehabilitation (CR) participants following a six week exercise and education program. In addition, factors influencing their attendance and their perceived achievements during the program, were also assessed.

**Subjects/Methods:** Participants of the Ipswich Cardiac Rehabilitation Service were surveyed at completion of the outpatient program. Perceived achievements, appropriateness of exercise, helpfulness of education and general satisfaction were assessed via three and five-point Likert scales. Data from 87 surveys were entered into a purpose-built SurveyMonkey program for analysis.

**Results:** The CR clinician in hospital (64%) was chosen more often than the patient's Specialist (33%) and GP (14%) as the factor that made them decide to join CR. Understanding of heart disease (89%), getting fitter (81%) and gaining confidence with exercise (67%), were the greatest perceived benefits of the program. Almost all patients (96.5%) found the exercise to be "just right". Education sessions were perceived as "Very Helpful" (47%), "Exceptionally Helpful" (31%) or "Somewhat Helpful" (7%) by all who attended. The remainder (15%) did not attend the education component. The majority of patients (85%) were "Very satisfied" with the program, with the remainder generally satisfied (15%).

**Conclusions:** The clinician who advises the patient of the CR service while they were in hospital is the greatest influence on the patient attending. The prescription of exercise is perceived as "just right" by a high majority of patients. Education sessions are helpful for all patients who attend. Overall, CR participants are highly satisfied with the level of care they receive.

**Day:** Friday, 22 August 2014  
**Session:** Concurrent Free Paper Sessions – Research  
**Room:** Level 1, Endeavour 2  
**Time:** 1215 – 1230 hours

## **REPORTING AND REPLICATING CARDIAC REHABILITATION TRIALS: DO WE KNOW WHAT THE RESEARCHERS ACTUALLY DID?**

Bridget Abell, Paul Glasziou, Tammy Hoffmann

*Centre for Research in Evidence-Based Practice, Bond University, Gold Coast*

**Introduction:** Taking complex interventions from research into practice requires complete details about the intervention, otherwise they cannot be replicated. In the cardiac rehabilitation literature there are deficiencies in the reporting of intervention components. This study aimed to quantify and describe the nature of reporting of cardiac rehabilitation interventions and determine if additional information, beyond the main publication, could be obtained.

**Methods:** Randomised trials (n=58) of exercise-based cardiac rehabilitation identified from a concurrent systematic review were assessed for completeness using the Template for Intervention Description and Replication (TIDieR) checklist, which specifies essential intervention details required for reporting and replication. Attempts were then made to obtain details about intervention components identified as missing through reference tracking, identifying online materials, and emailing trial authors.

**Results:** Included studies evaluated 73 different interventions. In the main publication, only 19 (26%) interventions provided sufficient detail about all individual components to enable replication. Intervention elements consistently well reported across studies were program duration, type and location, while exercise intensity was missing for half (49%) of the interventions and exercise time, mode and provider were each missing for 40% of interventions. While some (44%) authors provided additional intervention details, a large number (n=31) could or would not, leaving almost half (32/73; 44%) of the interventions missing at least one, but usually several, components.

**Conclusion:** Inadequate reporting of cardiac rehabilitation interventions is a substantial problem, with essential information about intervention components frequently missing. These deficiencies limit the use of the research in clinical practice.

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Research</b>
<b>Room:</b>	<b>Level 1, Endeavour 2</b>
<b>Time:</b>	<b>1230 – 1245 hours</b>

## **SCREENING AND ASSESSMENT PRACTICES IN CARDIAC REHABILITATION: A NATIONAL SURVEY OF CARDIAC REHABILITATION COORDINATORS**

Alun C Jackson<sup>1</sup> Barbara M Murphy<sup>1</sup> Rosemary O Higgins<sup>1</sup> Alison Beauchamp<sup>2</sup> Michael Le Grande<sup>1</sup> Michelle Rogerson<sup>1</sup>

1. Heart Research Centre, North Melbourne, VIC, Australia
2. Deakin University, Geelong, Vic, Australia

**Introduction:** It is recommended that cardiac risk factors are assessed at entry to CR programs and on exit. Traditional risk factors include blood pressure, cholesterol, weight, family history, smoking, physical activity and diet, while new risk factors include anxiety, depression, sedentary behavior, and sleep problems. CR provides the ideal opportunity for systematic assessment of traditional and new cardiac risk factors. However, little is known about current screening practices in CR. The aim of this study was to investigate and document a) screening practice in CR for a range of cardiac risk factors; and b) difficulties in undertaking screening.

**Methods:** An online survey of Australia's CR program coordinators was undertaken. The survey asked about screening practices across a range of traditional and new cardiac risk factors and included assessment of who undertakes the screening, what measures are used; how long it takes and the perceived barriers to screening.

**Results:** Some conditions were widely screened for on entry to CR (for example, 98.5% for physical activity; 86% for depression) while other risk factors were not covered as comprehensively (for example, 57.5% for sleep). Screening at program exit was lower for all risk factors except diet (68.6% on entry, 73.7% on exit). Lack of staff time and lack of familiarity with validated screening tools were identified as key barriers to screening.

**Conclusion:** Future research is needed to investigate ways of assisting CR staff to undertake screening across the full range of risk factors. Guidelines for standardised screening tools are required.

**Day:** Friday, 22 August 2014  
**Session:** Concurrent Free Paper Sessions – Research  
**Room:** Level 1, Endeavour 2  
**Time:** 1245 – 1250 hours (Mini Oral)

**ESTIMATION OF INCENTIVE SPIROMETER BEFORE AND AFTER CORONARY ARTERY BYPASS GRAFTING SURGERY: A CORRELATION OF INCENTIVE SPIROMETRY, LUNG FUNCTION TEST AND SIX MINUTES WALKING TEST IN NATIONAL HEART INSTITUTE, KUALA LUMPUR**

*Azran Ahmad*, Khairullizam, Ahmad Termizi  
*National Heart Institute, Kuala Lumpur, Malaysia*

**Introduction:** Measurement of vital capacity (VC) by spirometry is the most widely used technique for lung function evaluation, however, this form of assessment is costly and further investigation of other reliable methods at lower cost is necessary. Objective: To analyse the correlation between incentive spirometry, respiratory function test and six minutes walking test.

**Methods:** Retrospective descriptive study of 111 patients who admitted for elective CABG. Respiratory parameters were evaluated through the measurement of FVC and FEV1. To analyse data normality the Kolmogorov-Smirnov test was applied, for correlation the Pearson correlation coefficient was used and for comparison of variables in pre and post-operative period Chi square test was adopted. We established a level of significance of 5%.

**Results:** Averages, FVC and FVC1 standard deviation patterns accomplished through incentive spirometry in pre and post operator were analysed. The use of incentive spirometer was well tolerated and of easy comprehension by the patients. We can observe that FVC and FEV1 measures show high correlation in pre and post CABG surgery ( $r = 0.01$  and  $0.589$ ,  $p < 0.01$ ) Presenting a very high correlation between the evaluation forms studied.

**Conclusion:** There was a strong correlation between lung function test, six minutes walking test and incentive spirometer in pre and post CABG . This connection was highly evidenced in the results presented on this research, since the patients in pre and post operator cardiac surgery showed values VC measured by Lung function test, incentive spirometer and six minutes walking test.

**Day:** Friday, 22 August 2014  
**Session:** Concurrent Free Paper Sessions – Research  
**Room:** Level 1, Endeavour 2  
**Time:** 1250 – 1255 hours (Mini Oral)

## **AN EVALUATION OF INCENTIVE SPIROMETRY IN THE MANAGEMENT OF PULMONARY COMPLICATIONS AFTER CABG IN NATIONAL HEART INSTITUTE, KUALA LUMPUR**

*Azran Ahmad, Khairullizam, Ahmad Termizi  
National Heart Institute, Kuala Lumpur, Malaysia*

**Introduction:** Changes in pulmonary function and the development of atelectasis the postoperative period have been well documented in the adult population. The use of incentive spirometry has been shown to be effective in the prevention of these post-operative complications. The aim of this study was to evaluate this possibility patients after CABG.

**Methods:** Retrospective descriptive study of 1344 patient's data were collected to study from database between January to December 2013. Patients were excluded from study for one or more following reasons: (1) pre-existing pulmonary problems resulting in Lung Function Test. (2) post-operative intubation of longer than 72 hours. All patients had a median sternotomy, incentive spirometry were taken preoperatively and post operatively in the ICU. Comparison of variables in pre and post-operative Chi Square test was adopted.

**Results:** The sample consisted of 1344 patient's age range 19 years to 81years, median 59 years. Preoperative Incentive spirometry results gave a median 1500ml/s and post-operative incentive spirometry was 750ml/s. There was a significant loss of pulmonary function post operatively in four age group by 56% reduced of incentive spirometry result that indicated pulmonary functions of patients has reduced after CABG.

**Conclusion:** Incentive spirometry in the management of pulmonary complications after CABG is a handy tools of recovery and improvement apart from other methods of exercise breathing, however monitoring preoperative instruction, volume goals, and feedback are essential to optimal performance.

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Research</b>
<b>Room:</b>	<b>Level 1, Endeavour 2</b>
<b>Time:</b>	<b>1255 – 1300 hours (Mini Oral)</b>

## **IPHONE ECG SCREENING BY PRACTICE NURSES AND RECEPTIONISTS FOR ATRIAL FIBRILLATION IN GENERAL PRACTICE: THE GP-SEARCH QUALITATIVE PILOT STUDY**

Nicole Lowres<sup>1</sup>, [Jessica Orchard](#)<sup>1,2</sup>, Ben Freedman<sup>1</sup>, David Peiris<sup>1,2</sup>, Lis Neubeck<sup>2,3</sup>

1. *Sydney Medical School, University of Sydney, Sydney*

2. *The George Institute for Global Health, University Of Sydney, NSW, Australia*

3. *Sydney Nursing School, University of Sydney, Sydney*

**Background:** Atrial fibrillation (AF) is often asymptomatic and substantially increases stroke risk. A single-lead iPhone electrocardiograph (iECG) with a validated AF algorithm could make systematic general practice-based AF screening feasible.

**Methods:** Qualitative screening pilot study in three practices. Receptionists/practice nurses screened patients aged  $\geq 65$  years using iECG (transmitted to secure website) and general practitioner (GP) review was then provided during the patient's consultation. Fourteen semi-structured interviews with GPs, nurses, receptionists and patients were audio-recorded, transcribed and analysed thematically.

**Results:** 88 patients (51% male, mean age  $74.8 \pm 8.8$  years) were screened: 17 (19%) were in AF (all previously diagnosed). The iECG was well-accepted by GPs, nurses and patients. Receptionists were reluctant, while nurses were confident using the device, explaining and providing screening.

**Discussion:** AF screening in general practice is feasible. A promising model is likely to be one delivered by a practice nurse, but depends on relevant contextual factors for each practice.

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Psychosocial</b>
<b>Room:</b>	<b>Level 1, Sirius 1&amp;2</b>
<b>Time:</b>	<b>1215 – 1230 hours</b>

## **TALKING ABOUT SEX IN CARDIAC REHABILITATION**

Pamela Cohen, Christina Thompson

*St Vincent's Hospital, Sydney, Darlinghurst, NSW, Australia*

Sex is an integral part of human experience. Studies to date have identified many issues around sex that confront the cardiac patient. Although guidelines concerning sexual activity for the cardiac patient exist (American Heart Association 2012), there has been little consideration of how these issues might be addressed in cardiac rehabilitation programs.

The topic of sexual activity can be difficult to raise in a group program consisting of men and women of a variety of ages, backgrounds and experiences. However patients and their partners are not only relieved but also grateful that the topic is addressed. As this is an essential part of cardiac rehabilitation, decisions need to be made about whether patients' concerns are best addressed in a group or individually. Specific expertise in the topic is not necessary but a referral pathway for more complicated matters should be determined.

Drawing on the extensive experience in our cardiac rehabilitation program, this presentation will describe the sexual concerns of the patients, the way they are approached and how patients respond to the discussion. Our recommendations regarding management will be outlined, including suggestions about language, professional demeanour and boundaries.

With this group of patients, it is essential to apply group work knowledge and skills, so that interactive discussion rather than didactic presentation can occur. The principle underlying this therapeutic process is that of mutual aid in which the group leader enables the patients to help each other.



**Day:** Friday, 22 August 2014  
**Session:** Concurrent Free Paper Sessions – Psychosocial  
**Room:** Level 1, Sirius 1&2  
**Time:** 1230 – 1235 hours (Mini Oral)

## **PSYCHOMETRIC PROPERTIES OF THE CARDIAC DEPRESSION SCALE: A SYSTEMATIC REVIEW**

Chantal F Ski, Carolina A Chavez, David R Thompson  
*Australian Catholic University, East Melbourne, VIC, Australia*

**Introduction:** The prevalence of depression is high in cardiac patients. Depression has a significant impact on quality of life, adherence to therapy, and an independent effect on prognosis. The Cardiac Depression Scale (CDS) is the only instrument designed to measure depression in cardiac patients. This study systematically reviewed the psychometric properties of the CDS for screening of depression in patients with coronary heart disease (CHD).

**Methods:** A search of MEDLINE, EMBASE, CINAHL Plus, PsycINFO, Scopus and Web of Science was performed using the search term Cardiac Depression Scale in the title or abstract. Eligible studies were those that assessed reliability, validity or diagnostic accuracy of the CDS in patients with CHD. Methodological quality was assessed using the QUADAS-2 and STARD-D.

**Results:** Most studies assessed the reliability and validity of the CDS: three studies assessed construct validity using factor analysis; six studies assessed the validity of the CDS with other measures of depression; and four studies assessed its diagnostic accuracy. However, some studies reported overlapping samples, which reduces confidence in their evaluation.

**Conclusion:** This review finds the CDS to be a psychometrically sound measurement instrument for identifying mild, moderate and severe depression in cardiac populations.

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Psychosocial</b>
<b>Room:</b>	<b>Level 1, Sirius 1&amp;2</b>
<b>Time:</b>	<b>1235 – 1240 hours (Mini Oral)</b>

**ASSESSMENT OF LIFESTYLE MODIFICATION & COMPLIANCE WITH RISK FACTOR MANAGEMENT WITH & WITHOUT COGNITIVE BEHAVIOURAL THERAPY (CBT) INTERVENTION OF CARDIAC PATIENTS 6, 12, AND 24 MONTHS POST EVENT**

Helen Callum<sup>1</sup>, Sandy McKellar<sup>1</sup>, Gregg McDougall<sup>1</sup>, Julianne Hatcher<sup>1</sup>, Yvonne Connolly<sup>1</sup>, Matthew Pullen<sup>1</sup>, Rosemary Higgins<sup>2</sup>, Marian Worcester<sup>2</sup>

1. *The Wesley Hospital, Auchenflower, QLD, Australia*

2. *Heart Research Centre, Melbourne*

**Introduction:** The literature suggests that patient’s modifiable risk factors generally improve initially post cardiac event but they often revert to pre-event behaviours within 12 months. We have shown over 15 years with our current cardiac clients, that even those motivated to exercise regularly have either only maintained or have in fact regressed with their risk factors. In an effort to combat this trend we were looking for a long term strategy to truly make an impact on long term compliance with lifestyle modification.

**Method:** In conjunction with Wesley Research Institute & Heart Research Centre we ran a 2 year randomized control trial to assess the impact of Cognitive Behavioural Therapy 6 months post event to improve lifestyle modification regimes and establish long term compliance.

We reviewed patients at the 6,12,18 and 24 month marker assessing dietary habits; waist circumference; weight loss; quit smoking status; exercise frequency; Exercise session time & medication compliance.

**Results:** Our results showed the cognitive behavioural therapy intervention has made a significant impact on the female intervention group with reductions in BMI, Fat%, six minute walk test and weekly exercise. The males started to show changes in habits however this did not translate through to significant changes in anthropometric measures.

**Conclusion:** Future research needs to be done to better understand the impact of

- Why the outcomes of this intervention were more significant with the female cohort?
- Why were there significant changes at 12 &/or 18 months between intervention & control groups in some of the behaviours measured?

**Day:** Friday, 22 August 2014  
**Session:** Concurrent Free Paper Sessions – Psychosocial  
**Room:** Level 1, Sirius 1&2  
**Time:** 1240 – 1245 hours (Mini Oral)

## **EMOTIONAL WELLBEING OF WOMEN POST CARDIAC SURGERY**

Margaret Flaherty

*Canberra Hospital, Woden, ACT, Australia*

The aim of the study was to evaluate the emotional wellbeing of women post cardiac surgery. The objectives were to study the level of confidence in managing their work, home and social activities, the support required for ongoing wellbeing from family, friends and health practitioners, and the ability to seek help from appropriate services. Do women need support for a longer period of time, after completing the cardiac rehabilitation program (CRP), and to also assess the effectiveness of the education content conducted by CRP nurses in the pre and post-operative stages.

The target group were women who had surgery at Canberra Hospital and attended the CRP between 2007 and 2012, 80 women were eligible. A questionnaire was used and two focus groups were conducted.

24 Questionnaires were returned. 13 women consented to attend a focus group.

76% had retired, average age 75, 36% had a complication post-operative. 40% had short term emotional effects, 68% were unsure if they had long term emotional effects. 56% attended the education session pre op, 76% received the education book and 100% found it helpful. 91% felt pain was managed well. 84% felt they were treated with respect and dignity.

The qualitative data was divided into 5 themes of: Support, expectations, hospital experience/ Cardiac Rehab, emotional health and positive and negative comments. The most common comments involved expectations of family and the patient on recovery, and support they received when going home. Two patients remained depressed at three years since their surgery.

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<b>Session:</b>	<b>Concurrent Free Paper Sessions – Psychosocial</b>
<b>Room:</b>	<b>Level 1, Sirius 1&amp;2</b>
<b>Time:</b>	<b>1245 – 1250 hours (Mini Oral)</b>

## **EDUCATING FOR EMPOWERMENT IN CHRONIC HEART FAILURE PATIENTS**

Jan McKenzie, Sandy McKellar, Helen Callum  
*The Wesley Hospital, Auchenflower, Q'LD, Australia*

**Background:** The goals of the heart failure (HF) nurse include facilitating patient self-management, improvement in quality of life and reduction in hospital readmissions. Our program, now over 7 years old, is an inpatient, with telephone based follow-up service, and operates in conjunction with our Phase 1, 2 & 3 cardiac rehabilitation programs.

**Aim:** The telephone follow-up service of our HF program is not reimbursed by private health insurance agencies, therefore it is imperative that we deliver it in a timely, effective and efficient manner.

**Background:** In 2012, we were asked to participate in a research project looking at qualitative assessment of HF patient education. This gave us the opportunity to implement new tools and education material and compare these to the processes we currently had in place.

**Methods:** Over 18 months we enrolled participants who met the inclusion criteria, into the research project. We continued using our “usual” tools and education material in addition to the tools and material provided by the research organisation.

**Outcomes:** There was no statistically significant change demonstrated in readmission rates, however the new assessment tools were more efficient in not only assessing patient cognition into their HF but highlighted education openings as well.

**Implications for practice:** There is always a better, quicker, smarter, more cost-effective way to do things better. The tricky part is making time to find it.

**Key messages:** E = Empowerment as well as Education

<b>Day:</b>	<b>Friday, 22 August 2014</b>
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<b>Room:</b>	<b>Level 1, Sirius 1&amp;2</b>
<b>Time:</b>	<b>1250 – 1255 hours (Mini Oral)</b>

## **HEART FAILURE PATIENTS' SELF-CARE KNOWLEDGE AND SELF-CARE BEHAVIOURS, IMPACT OF COGNITIVE IMPAIRMENT AND CARER SUPPORT**

Precilla Sharp<sup>1</sup>, Robyn Gallagher<sup>2</sup>, Rhonda Delaney<sup>3</sup>, Anne Sullivan<sup>4</sup>, Susan Hales<sup>5</sup>, Geoff Tofter<sup>4</sup>

1. *Hornsby Hospital, Sydney*
2. *University of Sydney, Camperdown, NSW, Australia*
3. *Manly Hospital, Sydney*
4. *Royal North Shore Hospital, Sydney*
5. *Ryde Hospital, Sydney*

**Background:** Self-care by heart failure (HF) patients is essential to prevent unnecessary admissions and promote quality of life but the impact of factors on self-care are not understood.

**Methods:** HF patients (n = 46) enrolled in the Management of Cardiac Function (MACARF) program were assessed for self-care knowledge and behaviour and screened for cognitive impairment and partner support.

**Results:** Patients were aged mean 82.68 years (SD 7.8), mostly male (62%). HF knowledge was high at baseline mean 7.32 points (SD .95), scores decreased significantly by 6 months but remained high. For self-care, all patients reported restricting their salt intake, 80% reported regular weighs and 60% regular exercise. Better self-care was reported by patients with better heart function, cognitive impairment and high partner support (Table 1).

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Psychosocial</b>
<b>Room:</b>	<b>Level 1, Sirius 1&amp;2</b>
<b>Time:</b>	<b>1255 – 1300 hours (Mini Oral)</b>

## **ENGAGING CONSUMERS AND STAKEHOLDERS IN CARDIAC REHABILITATION ADVOCACY**

Shelley McRae

*Heart Foundation, Subiaco, WA, Australia*

**Background:** There is a strong body of evidence demonstrating the effectiveness of cardiac rehabilitation. Despite this, referral and participation rates are suboptimal. Attendance is influenced by lack of perceived need, transport difficulties, work/social commitments and service availability. The focus of this project was to address the influencing factor, 'lack of perceived need'.

**Purpose:** To complement a broader advocacy strategy and develop a poster to engage and increase: a) Appreciation of the benefits. b) Understanding of available services. c) Motivation to advocate for cardiac rehabilitation.

**Methods:** We developed a poster targeting consumers and health professionals to be placed in cardiac service areas, general practice and for general Heart Foundation use. The development involved 4 stages: 1. A survey amongst health professionals to garner interest and concept feedback. 2. A draft was developed and feedback sought from original health professional group. 3. Consumer testing was conducted via three focus groups and individual discussions. 4. A launch at a health professional forum with the poster subject 'sharing her story'

**Outcomes:** The health professional survey provided feedback on willingness to display the poster, agreement on its usefulness, and suitable messages. Focus groups and individual feedback elicited responses on the messaging, appeal and layout, offering valuable insights for refinement. Using a real subject in the poster and allowing her to share her story with health professionals provided a meaningful, local flavour.

**Conclusions:** Broad consultation throughout the process has developed meaningful messages with appropriate patient centred language. It has mobilised support for advocacy and aided dissemination.

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Cardiovascular Disease</b>
<b>Room:</b>	<b>Level 1, Endeavour 1&amp;2</b>
<b>Time:</b>	<b>1400 – 1430 hours</b>

## **CHEMOTHERAPY AND THE HEART: CHEMOTHERAPY-INDUCED CARDIOTOXICITY, MALIGNANCIES AND CARDIAC IMAGING**

Gemma Figtree, Claire Lawley

*Kolling Institute of Medical Research and Royal North Shore Hospital, University of Sydney, NSW, Australia*

The heart is affected by cancer. It is both a site for primary and metastatic malignancy as well as an organ detrimentally impacted by some anti-cancer treatments, with recipients developing cardiotoxicity. There is a clear need for identification of risk factors for cardiac deterioration prior to commencing anti-cancer treatment. As well as this, techniques are needed to allow early identification of cardiotoxicity during treatment, prior to the development of symptomatic damage. Cardiac magnetic resonance imaging provides a unique opportunity to image the heart. It allows the characterisation of malignancy as well as monitoring for treatment-associated cardiac damage, prior to heart failure symptoms. It is hoped that a multidisciplinary approach to care, stratifying cardiac risk and supporting cancer survivors, combined with the appropriate use of imaging, will lead to a reduction in the cardiac morbidity in those affected by cancer.

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>National Keynote Presentation Cardiovascular Disease</b>
<b>Room:</b>	<b>Level 1, Endeavour 1&amp;2</b>
<b>Time:</b>	<b>1430 – 1515 hours</b>

## **SEXUAL ACTIVITY AND THE PERSON WITH DISABILITY**

Rachel Wotton

*Founding member, Touching Base, Sydney, NSW, Australia*

Sex sells everything – from perfume, cars, clothing and even ice cream. Why is it then, that even in the medical arena, the issue of sexual expression is often the ‘elephant in the room’?

As a sex worker who provides sexual services to clients with disability I often hear about the negative reactions and attitudes people are faced with when trying to discover what their bodies will – and wont – do when they are going through rehabilitation. We must never underestimate the importance of touch, affection and intimate contact for people, especially those who may be going through some serious life changes due to medical procedures, illness or injury.

I will outline the numerous roles that sex workers can fulfil during this stage as well as share a multitude of resources people can utilise to assist such discussions. While seeing a sex worker is not for everyone, my personal experience shows that, for some, it can be an educative and fun experience.



<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Concurrent Workshops</b>
<b>Room:</b>	<b>Level 1, Endeavour 1</b>
<b>Time:</b>	<b>1545 - 1715 hours</b>

### **CARDIAC REHAB 101: INTRODUCTION TO EXERCISE PRESCRIPTION FOR CR**

The purpose of this workshop is to provide information and advice to new and emerging cardiac rehabilitation clinicians providing exercise programs. Learning outcomes of this workshop include:

- Risk stratifying and screening of cardiac patients; what, how, why
- Assessment of functional status, the role of the Six Minute Walk Test
- Delivery of a Six Minute Walk Test – how to guide, with minimal resources
- Considerations for exercise programming for cardiac patients within CR service capabilities
- Initial exercise prescription of cardiac patients with respect to CR service capabilities
- Monitoring of cardiac patients pre, during, post exercise sessions
- Progression of exercise programming for cardiac patients

This workshop will include direct information delivery, small group work and larger group discussions. While this session is directed toward emerging clinicians, experienced professionals are encouraged to attend to share your knowledge and experience.

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Concurrent Workshops</b>
<b>Room:</b>	<b>Level 1, Endeavour 2</b>
<b>Time:</b>	<b>1545 – 1715 hours</b>

### **TECHNOLOGY & INNOVATION**

New technologies can enhance and complement care for cardiovascular patients. Learn about four new technologies and how they might enhance your practice. Our fantastic workshop presenters will give an overview of their specific projects with the focus on how this might be translated into your clinical practice. Learn about how you can use an iPhone to diagnose an arrhythmia, or how text messaging could supplement your cardiac rehabilitation programs. What can you learn online and how can this evolve to support you? How can eHealth technologies enhance care and how could you put these tools to work for you? We look forward to a lively and engaging discussion!

<b>Day:</b>	<b>Friday, 22 August 2014</b>
<b>Session:</b>	<b>Concurrent Workshops</b>
<b>Room:</b>	<b>Level 1, Sirius 1&amp;2</b>
<b>Time:</b>	<b>1545 – 1715 hours</b>

### **SEX, CARDIOVASCULAR DISEASE AND CO-MORBIDITIES**

Sex and sexual health is a fundamental component of living. Yet people with cardiovascular disease have found that their condition may negatively impact on their sexual health and sexual function. Clinician's also find discussing sex and sexuality challenging and lack the confidence or have the skills to support people in difficulty. This interactive workshop will explore the impact of illness on sex and sexual health and how clinicians can support people having difficulty.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Plenary – Contemporary Considerations in Cardiac Rehabilitation National Keynote Presentation</b>
<b>Room:</b>	<b>Level 1, Endeavour 1&amp;2</b>
<b>Time:</b>	<b>0900 - 0940 hours</b>

## **CAFFEINE, DRUGS AND THE HEART**

Chris Semsarian

*Professor, Cardiology, University of Sydney, Camperdown, NSW, Australia*

Caffeine consumption can encompass a wide range of products, from chocolate and coffee, to caffeine tongue strips and energy drinks. While these products are widely available, and accessible to all ages, there is growing evidence that excess caffeine can influence the normal functioning of the heart, and in susceptible individuals, may even lead to cardiac arrest and sudden death. This has arisen most prominently in the consumption of energy drinks, particularly in children and teenagers.

Energy drinks typically comprise high levels of caffeine, as well as other additives such as guarana, taurine and sugar. The main cardiovascular effects of high caffeine include increased heart rate, palpitations, increased blood pressure, improved exercise endurance, anxiety, insomnia, vomiting, nervousness and irritability. A number of recent reports suggest that energy drinks not only trigger cardiac events, but much like an exercise test, or an adrenaline-challenge, can unmask an underlying primary pathogenic disorder, such as long QT or Brugada syndrome (1). These reports highlight the potential detrimental cardiac effects of caffeine and other ingredients in energy drinks, particularly in those who may be predisposed to arrhythmias due to an underlying heart disease.

Greater community education and awareness needs to be promoted regarding the effects of high levels of caffeine. This may include more drastic measures, including more graphic and clear warnings on energy drink cans to warn people of the potential dangers, and perhaps to restrict the sales of energy drinks to children and adolescents, often the target of advertising campaigns and under significant peer influence. The collective goal of such measures is to prevent the incidence of potentially life-threatening cardiac rhythm problems, particularly in the young, by raising awareness in the community of the potential detrimental effects of high-caffeine energy drinks.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Plenary – Contemporary Considerations in Cardiac Rehabilitation International Keynote Presentation</b>
<b>Room:</b>	<b>Level 1, Endeavour 1&amp;2</b>
<b>Time:</b>	<b>0940 – 1025 hours</b>

## **NON-INVASIVE MEASURES OF CARDIOVASCULAR DISEASE**

Lee Stoner

*Lecturer, School of Sport and Exercise, Massey University, Palmerston North, New Zealand*

The pathological complications of atherosclerosis, namely cardiovascular diseases (CVD), remain the leading cause of mortality in the Western world. CVD has a very long asymptomatic phase of development, starting as early as the first decade of life. It is imperative, therefore, that clinicians, clinical scientists and epidemiologists have at their disposal simple, valid, and reliable techniques to assess and track the progression of atherosclerosis. This talk will briefly outline the pathology of atherosclerosis, and link the pathology to established and emerging assessments of vascular health, including assessments of endothelial function, arterial stiffness and intima-media thickness.

**Day:** Saturday, 23 August 2014  
**Session:** Clinical Prize Session  
**Room:** Level 1, Endeavour 1&2  
**Time:** 1100 - 1115 hours

## **OPTIMISING THE RESOURCES “WHAT’S WRONG WITH MY HEART” DVD DURING A HOSPITAL ADMISSION IN A CENTRE WITH COMPREHENSIVE CARDIAC REHABILITATION AND PREVENTION SERVICES**

Tracy Swanson<sup>1,2</sup>, Craig Cheetham<sup>1,3</sup>

1. *Cardiovascular Care WA, Perth, WA, Australia*

2. *Cardiac Rehabilitation and Secondary Prevention, Hollywood Private Hospital, Perth, WA, Australia*

3. *School of Sports Science, Exercise and Health, University of Western Australia, Perth, WA, Australia*

**Background:** “What’s wrong with my heart” is a 2-disc DVD developed by Ashford Hospital-South Australia covering risk factor modification, self-management, and supporting attendance to cardiac rehabilitation. The purpose of this study was to assess optimal time to view the resource during admission and if it complemented existing resources within Coronary Care Unit (CCU) at Hollywood Private Hospital.

**Method:** Patients with ischaemic heart disease viewed the resource on a portable player. The anonymous Questionnaire was developed to assess satisfaction, timing of delivery, role in complementing usual care and ease of use. It was initiated during variable phases of a patient’s admission.

**Results:** To date-20 patients completed the questionnaire. 65%male. Mean age: 66yrs. All patients watched DVD-1, 65% viewing both DVD’s. All patients indicated the content improved understanding in all 5 areas; heart condition, treatments, procedure, diet and medications. 45% of patients viewed the resource before their procedure, 50% after, and 5% didn’t answer the question. Of those who viewed the resource before their procedure, 89% considered this optimal viewing time. Of the patients who viewed after their procedure, 70% preferred a different time. 70% would purchase the DVD. 95% would recommend it to patients and family. All reported the DVD player was easy to use.

**Conclusion:** Adults benefit from information provided in various formats. This study demonstrated the DVD improved patient understanding and complemented information provided within CCU. Portable DVD players are inexpensive and easy to use. There is evidence of the value of viewing pre-procedurally and has the capacity for broad application.

**Day:** Saturday, 23 August 2014  
**Session:** Clinical Prize Session  
**Room:** Level 1, Endeavour 1&2  
**Time:** 1115 - 1130 hours

## **PROMOTING QUALITY USE OF MEDICINES (QUM) FOR ACUTE CORONARY SYNDROME (ACS) AND HEART FAILURE (HF) PATIENTS AT DISCHARGE: NATIONAL INDICATORS FOR HOSPITALS**

Sasha Bennett<sup>1,2</sup>, Katie Kerr<sup>2</sup>, Gillian Sharratt<sup>2</sup>

1. *Cardiac Rehabilitation Program, St Vincent's Hospital, Sydney, NSW, Australia*

2. *NSW Therapeutic Advisory Group, Darlinghurst, NSW, Australia*

**Background:** QUM indicators are useful tools to measure the safety and quality of medicines use and drive practice improvement. Indicators for discharge prescription of ACS and HF medications in Australian hospitals were published in 2007.

**Aim:** To update national QUM indicators to promote guideline-concordant prescribing for ACS and HF patients at hospital discharge.

**Methods:** A review of current guidelines identified gaps in the existing indicators. Key individuals and organisations were consulted. Three Australian hospitals field-tested the two revised indicators using standardised data collection tools. Hospitals provided collated results and feedback on the measurability, feasibility and relevance of each indicator. A multidisciplinary Expert Advisory Group reviewed feedback and finalised the indicators.

**Outcomes:** Field-testing of both indicators demonstrated variability regarding appropriate medicines use. Auditors reported the indicators provided useful, relevant information to inform practice improvement. Data collection tools enabled breakdown of data for targeting specific areas for quality improvement.

**Implications for clinical practice:** The indicators will drive improvements in the medicines management of HF and ACS patients and provide evidence for meeting National Safety and Quality Health Service Standards.

**Conclusions:** Two QUM indicators that measure compliance with medication recommendations of current ACS and HF guidelines have been published as part of the National Quality Use of Medicines Indicators for Australian Hospitals, 2014: Percentage of patients with acute coronary syndrome that are prescribed appropriate medications at discharge; and, Percentage of patients with systolic heart failure that are prescribed appropriate medications at discharge. Next steps include real-time indicator measurement as part of routine practice.

**Day:** Saturday, 23 August 2014  
**Session:** Clinical Prize Session  
**Room:** Level 1, Endeavour 1&2  
**Time:** 1130 - 1145 hours

## **PREVALENCE OF SEXUAL ACTIVITY IN A CARDIAC REHABILITATION POPULATION: A TWELVE MONTH NATURAL HISTORY STUDY**

Christina Thompson, H. Brake, Pamela Cohen  
*St Vincent's Hospital, Darlinghurst, NSW, Australia*

**Background:** Cardiac patients of both genders and all ages are less sexually active following a cardiac event. Despite improvements in function following Cardiac Rehabilitation (CR), sexual dysfunction remains an issue. Even in a sexually active population, following myocardial infarction (MI), 40% of male patients experienced erectile dysfunction. Surgical patients also report reduced desire and function following surgery. Despite the importance and effectiveness of discussing sexual activity, evidence suggests that staff are reluctant to raise the issue. This paper will focus on a cohort attending CR over a 12-month period and report on return to sexual activity.

**Methods:** Routine clinical data were recorded for a continuous cohort of patients following cardiac events such as percutaneous intervention (PCI), MI +/- PCI, cardiac surgery or other cardiac diagnosis. Data analysis was retrospective using descriptive statistics to identify rates of return to sexual activity and factors that influence return to sexual activity.

**Results:** 152 patients, 116 men (76%), 36 women (24%) were included in the study. Overall 50% of patients reported that sexual activity was no longer a part of their life, 10% were not ready but intended to resume sexual activity and 40% were engaging in sexual activity on exit from the CR program. Factors effecting performance included level of desire, pain, fatigue, mood and sleep.

**Implications for practice:** CR patients are comfortable discussing progress regarding their return to activity including sexual activity. The information they provide increases our understanding of their issues, enables clinicians to reassure them and provide appropriate intervention.



<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Clinical Prize Session</b>
<b>Room:</b>	<b>Level 1, Endeavour 1&amp;2</b>
<b>Time:</b>	<b>1145 – 1200 hours</b>

## **FEASIBILITY OF IMPLEMENTING A MOBILE HEALTH HOME-BASED CARDIAC REHABILITATION PROGRAM**

Marlien Varnfield<sup>1</sup>, Mohan Karunanithi<sup>1</sup>, Hang Ding<sup>1</sup>, Chi-Keung Lee<sup>2</sup>, Desre Arnold<sup>2</sup>, Enone Honeyman<sup>1</sup>, Darren Walters<sup>3</sup>

1. *Australian e-Health Research Centre, CSIRO, Herston, QLD, Australia*
2. *Complex Chronic Disease Team, Metro North Hospital and Health Service, Brisbane, QLD, Australia*
3. *Department of Cardiology, The Prince Charles Hospital, Brisbane, QLD, Australia*

**Background:** Cardiac rehabilitation (CR) is pivotal in preventing recurring cardiac events but utilisation of these programs is alarmingly low. The Care Assessment Platform (CAP) is a home-care delivery model, using smartphones and the Internet, designed to improve CR participation. A randomised controlled trial demonstrated CAP CR to deliver health outcomes similar to that of traditional centre-based CR and to significantly improve participation rates. Further research was undertaken to evaluate the feasibility of implementing CAP-CR in practice.

**Methods:** Analyses were performed on data collected during the CAP CR clinical trial, in terms of program reach (enrolment rate), implementation fidelity (usage of smartphone health applications (apps) and supplied measurement devices, and exposure to educational and motivational content), program adoption and user perspectives.

**Outcomes:** Reach in the trial was 33% (120/369). More than 84% of CAP CR participants used the smartphone apps and measuring devices, daily. Adherence to recommended health entries was high and more than 80% viewed motivational and educational multimedia videos preloaded on their phone. User adoption was high and participant and mentor perceptions of the program were positive.

**Implications for practice:** CAP-CR was suitable and acceptable for delivering CR. Change in the existing CR services and systems may require new clinical responsibilities, time for training, and development and openness to new approaches and methodologies.

**Conclusion:** CAP CR has the potential to improve user participation, and it is an efficacious, scalable, accessible and acceptable option for delivering CR to individuals who are not willing or able to attend traditional centre-based CR programs.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Physical Activity</b>
<b>Room:</b>	<b>Level 1, Endeavour 1</b>
<b>Time:</b>	<b>1215 - 1230 hours</b>

## **EVALUATING THE EFFECT AGE AND GENDER HAS ON THE ABILITY TO IMPROVE FUNCTIONAL CAPACITY USING 6MWT AS MEASURE**

Debora Snow<sup>1</sup>, Kathy O'Donnell<sup>1</sup>

*1. GCHHS – Queensland Health, Elnora, QLD, Australia*

**Background:** The Gold Coast has a largely aging population resulting in a large representation of older participants in the cardiac rehabilitation and heart failure programs. The purpose of this study was to identify the effect increasing age and gender has on the ability to improve functional capacity from exercise training.

**Aim:** To evaluate the effectiveness of group based exercise across all cardiac clients using six minute walk test (6MWT) as measure.

**Method:** This was a retrospective study looking at pre and post measures of 6MWT for all clients who completed the cardiac rehabilitation and heart failure exercise program. 959 participants were classified into 4 groups – percutaneous coronary intervention, surgery, chronic heart failure and other. They were further broken into gender and age sub-groups.

**Outcomes:** Mean improvement for all participants was 20.1% with a range of 15.3 - 22.2% across the four sub-groups. When considered by age all groups showed a significant improvement, particularly evident in the female group aged 80+. Though an age related decline in improvement was observed, older subjects achieved a post-training 6MWT distance similar to a pre-training 6MWT result of an age group 20 years younger.

**Implications for practice:** This study provides evidence that both men and women of all ages can benefit from attending group based exercise programs. The result will inform the practise of referring clients of all ages to attend the cardiac rehabilitation and heart failure programs.

**Conclusion/Key message:** Regular and sustained exercise training in both genders and all age groups produce significant improvements in functional capacity.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Physical Activity</b>
<b>Room:</b>	<b>Level 1, Endeavour 1</b>
<b>Time:</b>	<b>1230 – 1245 hours</b>

## **REDUCING MORTALITY WITH EXERCISE-BASED CARDIAC REHABILITATION: IS IT WHAT PATIENTS DO OR HOW WELL THEY STICK WITH IT?**

Bridget Abell, Tammy Hoffmann, Paul Glasziou

*Centre for Research in Evidence-Based Practice, Bond University, Gold Coast*

**Introduction:** Cardiac rehabilitation provides significant benefit to patients with coronary heart disease however, there is significant variation between interventions in terms of program characteristics. Individual components of the intervention such as intensity, setting or duration may provide different relative contributions to the outcomes observed. This study aimed to examine evidence about cardiac rehabilitation interventions to determine the influence of individual components on clinical outcomes.

**Methods:** A systematic review and meta-analysis were carried out to examine the effects of exercise-based cardiac rehabilitation on the clinical outcomes of all-cause and cardiovascular mortality. Subsequent subgroup meta-analysis and meta-regression have been conducted to examine the relative contribution of individual components such as compliance, provider, duration and exercise dose (intensity, frequency, time) to overall program outcome.

**Results:** Forty-eight studies were identified, evaluating sixty-one interventions differing markedly in individual program characteristics. Meta-regression did not identify a particular intervention component which significantly influenced mortality outcomes, although several approached significance (program duration for all-cause mortality; session time and frequency for cardiovascular mortality). For studies which reported compliance of participants with the prescribed program, the level of compliance (high, moderate or poor) significantly predicted the risk of subsequent all-cause and cardiovascular mortality. Analysis was limited however by substantial missing information about the characteristics of individual programs.

**Conclusion:** Current research does not provide evidence that any one program characteristic is more influential in effecting subsequent mortality, although this analysis is limited by missing trial data. Findings suggest it may be more important to increase participant compliance regardless of the characteristics of the individual program.

**Day:** Saturday, 23 August 2014  
**Session:** Concurrent Free Paper Sessions – Physical Activity  
**Room:** Level 1, Endeavour 1  
**Time:** 1245 - 1300

## **EFFECT OF EARLY EXERCISE ENGAGEMENT ON ARTERIAL STIFFNESS IN PATIENTS DIAGNOSED WITH A TRANSIENT ISCHAEMIC ATTACK: EFFICACY OF IMPLEMENTING A CARDIAC REHABILITATION EXERCISE PROGRAM**

James Faulkner<sup>1</sup>, Brandon Woolley<sup>1</sup>, Sally Lark<sup>1</sup>, Laikin Wong<sup>2</sup>, Jeremy Lanford<sup>2</sup>, Lee Stoner<sup>1</sup>

1. Massey University, Wellington

2. Wellington Hospital, Wellington

**Introduction:** Recent empirical evidence with ischaemic stroke and transient ischaemic attack (TIA) patients has demonstrated that regular physical activity participation may be an important secondary prevention strategy as it can elicit significant reductions in coronary artery disease risk factors and may initiate improvements in cardiorespiratory fitness<sup>1</sup>. However, the elastic properties of large arteries have been suggested to pose a strong and independent risk factor for stroke<sup>2</sup>. The purpose of this study was to investigate the efficacy of a cardiac rehabilitation type exercise programme on common carotid artery stiffness in patients recently diagnosed with TIA.

**Methods:** Twenty-five participants (mean  $\pm$  SD; 66  $\pm$  12 y, 1.72  $\pm$  0.07 m, 85.5  $\pm$  12.4 kg), recruited within 2 weeks of TIA diagnosis, completed a risk stratification assessment and underwent measures of arterial stiffness (compliance and distensibility). Participants were then randomised to either an exercise (EX; 8-week intervention), or to a usual-care control (CON) condition. Identical measures were obtained post-intervention.

**Results:** Analysis of variance demonstrated a significant increase in compliance (0.71  $\pm$  0.24 vs. 0.83  $\pm$  0.28 mm<sup>2</sup>•kPa<sup>-1</sup>, P < 0.05) and distensibility (15.98  $\pm$  5.95 vs. 19.49  $\pm$  6.60 10<sup>-3</sup>•kPa<sup>-1</sup>, P < 0.05) for EX, but not for CON (P > 0.05).

**Conclusion:** The present study has demonstrated that participation in a cardiac rehabilitation type exercise programme soon after TIA diagnosis leads to improved large artery health. These improvements in vascular health may reduce the risk of an ensuing or recurring cardio- or cerebrovascular event.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Nutrition</b>
<b>Room:</b>	<b>Level 1, Endeavour 2</b>
<b>Time:</b>	<b>1215 - 1230 hours</b>

## **CAN FAMILIES IMPROVE THEIR DIET QUALITY WHEN TRYING TO REDUCE THEIR CVD RISK?**

Tracy L Schumacher, Tracy L Burrows, Neil Spratt, Robin Callister, Clare Collins  
*Faculty of Health and Medicine, University of Newcastle, Callaghan, NSW, Australia*

**Introduction:** Diet quality scores measure alignment with national dietary guidelines. Improving diet quality is a key target of cardiovascular disease (CVD) prevention programs. The aim of this pilot study was to investigate the change in participant's diet quality following the Love your Food, Love your Heart, Love your Family heart health intervention.

**Methods:** Families with an index person at increased CVD risk participated in a three-month cardiovascular-risk-reduction dietary intervention program. Families were randomised to either the control group (minimal dietary feedback) or the targeted dietary feedback intervention, including a 45-minute counselling session from an Accredited Practising Dietician (APD) that focussed on improving diet to reduce CVD risk. Diet quality was assessed at baseline and three-month follow-up using the Australian Recommended Food Score (ARFS), a validated diet quality score derived from the Australian Eating Survey, with a maximum score of 73 points. Change in ARFS score was evaluated using paired t tests with equal variance and Cohen's d for effect size.

**Results:** Preliminary results from 33 participants (13 families) indicates that the intervention group (n=17) improved their diet quality by 7.4 (95%CI: 3.9-10.9) points, with no change in the control group (n=16) 1.2 (-1.4-3.9) points, (diff=6.16 [1.89-10.43], p=0.006, Cohen's d=1.029, rYI=0.46).

**Conclusion:** Family members can improve their diet quality following counselling and advice given in the context of personalised feedback for CVD risk reduction by an APD. Further studies evaluating strategies to improve diet quality in order to lower CVD risk are warranted.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Nutrition</b>
<b>Room:</b>	<b>Level 1, Endeavour 2</b>
<b>Time:</b>	<b>1230 - 1235 hours (Mini Oral)</b>

## **“I KNOW WHAT I’M SUPPOSED TO EAT BUT...”: WHAT FAMILIES PARTICIPATING IN A CVD RISK REDUCTION DIET STUDY THINK ABOUT EATING THE ‘RIGHT’ FOOD FOR HEART HEALTH**

Tracy L Schumacher<sup>1</sup>, Tracy L Burrows<sup>2</sup>, Neil Spratt<sup>2</sup>, Deborah Thompson<sup>3</sup>, Robin Callister<sup>1</sup>, Clare Collins<sup>2</sup>

1. *Faculty of Health and Medicine, University of Newcastle, Callaghan, NSW, Australia*

2. *University of Newcastle, Callaghan, NSW, Australia*

3. *Children’s Nutrition Research Centre, Baylor College of Medicine, Houston, Texas, United States*

**Introduction:** Recruitment into CVD dietary interventions is challenging. The aim was to investigate motivations, risk perceptions and barriers to engagement in the Love your Food, Love your Heart, Love your Family heart health program.

**Methods:** Family members completing the pilot study intervention were invited to participate in semi-structured telephone interviews. Initial analysis was performed using a standard inductive qualitative approach with NVIVO 10 thematic analysis.

**Results:** Preliminary analysis identified emerging themes of: balancing risks and benefits of heart health through diet, preconceptions of eating well and barriers to further improvements.

Participants had poor perception of their absolute cardiovascular risk despite previous invasive CVD procedures or strong family histories. Diet was seen as important, but not at the expense of “enjoying life”. Most thought they had an “average” healthy diet, but placed value in making a number of small dietary changes. Some experienced guilt for not adhering to healthy heart eating. Barriers to improvements were identified as time constraints and resistance from significant others. Those who participated for the sake of another ‘higher risk’ family member were more prepared to make dietary changes and develop strategies for improvement. Participants placed a high level of trust in their general practitioner and reported they would happily accept referral to an allied health professional for further treatment.

**Conclusion:** A low perception of CVD health risk and assumption they were already consuming a healthy diet are barriers in engaging families at high risk of CVD to participate in interventions targeting CVD risk reduction.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Nutrition</b>
<b>Room:</b>	<b>Level 1, Endeavour 2</b>
<b>Time:</b>	<b>1235 – 1240 hours (Mini Oral)</b>

## **INTEGRATED CARE THROUGH SERVICE REDESIGN: CREATING OPPORTUNITIES FOR CAPACITY AND DISINVESTMENT**

Glenn Paull<sup>1</sup>, Kym Turnell<sup>1</sup>, Nhi Vuong<sup>1</sup>, Yan Gao<sup>1</sup>, Michael Russo<sup>2</sup>, Beth Connolly<sup>1</sup>, Esther Ang<sup>1</sup>

1. *St. George Hospital SESLHD, Kogarah, NSW, Australia*

2. *Community Engagement & Health Promotion, South Eastern Sydney Medicare Local Limited, Sydney, NSW, Australia*

**Background:** Despite proven benefits, outpatient cardiac rehabilitation (CR) services are underutilised and have been challenged to increase participation rates. For this to be realised, CR services will be required to create capacity and maintain quality of clinical interventions within existing resource allocation.

Peak bodies have called for an integrated care strategy and greater collaboration between hospitals and the primary care sector. Opportunities exist for tertiary facilities to redesign service delivery models to prioritise and create capacity for acute services while transitioning maintenance care to the primary care sector.

**Aim:** To create capacity, maintain clinical outcomes and develop an integrated care model through service design.

**Methods:** Phase 2 and maintenance class requirements were reviewed and goal setting refined to provide a framework for transition to primary care sector maintenance services. A collaborative transition model was developed in partnership with Medicare Local to address referral, communication, patient centred goals and information needs.

**Outcomes:** Service redesign resulted in an additional phase 2 class and disinvestment in maintenance classes which have been transitioned to a Medicare Local exercise referral scheme and consistent with an integrated care approach. Reduction in class size has created capacity without compromising quality of clinical interventions.

**Implications for Practice:** CR outpatient programs can create capacity and prioritise acute need through developing integrated care models to transition patients to the primary care sector.

**Conclusion:** CR service redesign demonstrates an integrated model of care reflecting both State and Federal government priorities. The development of constructive relationships with Medicare Local for care transition provides a model for other specialities.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Nutrition</b>
<b>Room:</b>	<b>Level 1, Endeavour 2</b>
<b>Time:</b>	<b>1240 – 1245 hours (Mini Oral)</b>

## **HOW EXPERT NURSE REVIEW IMPACTS ON CARDIAC REHABILITATION PATIENT OUTCOMES**

Janice M Smith, Hellen Hartney, Sylvia Monckton, Vicki Murray-Williams  
*Nepean Hospital, PENRITH, NSW, Australia*

**Background/rationale:** Cardiac Rehabilitation, (CR) when delivered by trained health professionals has a demonstrated evidence base for long term benefits. However, it is often a challenge to demonstrate cost effectiveness in terms of staff utilisation, in order to justify resources in the current economic climate.

**Aim:** Nepean Cardiac Rehabilitation service undertook an analysis of the range of clinical decisions the expert staff make in the course of a participants attendance at the Outpatient Cardiac Rehabilitation programme.

**Methods:** In 2013 a twelve month data review was undertaken of the occasions when the CR expert staff were able to identify issues of concern (clinical issues) in participants. These issues have been thematically analysed.

**Outcomes:** The findings were, one in three of our CR patients have had a significant clinical issue identified by their expert CR Nurse during their outpatient programme participation. At the time, these issues were communicated to the treating teams and relevant health care providers in order to allow early intervention, thus preventing clinical deterioration, readmissions or further cardiac events.

**Implications for practice/Conclusion:** This review has enabled us to quantify the proportion of CR participants who are identified as having a significant clinical issue during their outpatient programme. While this highlights the importance of the expert Nurse role in this identification, the future challenge will be to demonstrate how the improved patient outcomes, can be shown to translate to cost savings through early intervention and reduced readmissions.



<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Service Delivery</b>
<b>Room:</b>	<b>Level 1, Sirius 1&amp;2</b>
<b>Time:</b>	<b>1215 - 1230 hours</b>

## **CONTEMPORARY IN-HOSPITAL ATRIAL FIBRILLATION: WHO GETS GUIDELINE-BASED THERAPY?**

Kellie Roach<sup>1</sup>, Ross Proctor<sup>2</sup>, Lis Neubeck<sup>3</sup>, Leonie Sadler<sup>4</sup>, Julie Belshaw<sup>5</sup>, Ann Kirkness<sup>2</sup>, Ling Zhang<sup>3</sup>, Robyn Gallagher<sup>3</sup>

1. Ryde Hospital, Sydney
2. Royal North Shore Hospital, Sydney
3. University of Sydney, Camperdown, NSW, Australia
4. Manly Hospital, Sydney
5. Hornsby Hospital, Sydney

**Introduction:** Atrial fibrillation (AF) is common, with a lifetime risk of 1:4 for adults worldwide and increases the risk of stroke 5-7 fold. Appropriate treatment with anticoagulant therapy is recommended by international guidelines.

**Methods:** We aimed to describe guideline-based therapy in patients admitted with AF by auditing the medical records of cardiac wards.

**Results:** Patients (n = 204) admitted to hospital with AF were 50% male and mean age was 74 years (SD 13). Patients had paroxysmal (48%), permanent (33%) or persistent AF (16%). The majority had a previous history of AF (62%), and some patients had a pacemaker (8%) or implantable cardioverter defibrillator (3%), however for 19% the AF diagnosis was new.

Patients who had AF tended to have a complex medical history and usually had at least one other diagnosis (81%). The most common of these diagnoses were respiratory disease (33%), coronary heart disease (29%), HF (25%) and valve disease (17%). The most common anticoagulant medication was warfarin (61%) followed by aspirin (38%), 65% were classified as moderate/high risk (CHADS 2 score  $\geq 2$ ), of these 67% were prescribed warfarin and 23% had a documented reason for not being prescribed e.g. risk of falls (9%) or refusal (5%). Predictors increasing the odds of prescription were at risk classification (OR 9.62), valve disease (OR 9.88) and those decreasing the odds were paroxysmal AF (OR .34) and prescribed aspirin (OR .21).

**Conclusion:** Guidelines are not used consistently for anticoagulant therapy, more systematic processes are needed.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Service Delivery</b>
<b>Room:</b>	<b>Level 1, Sirius 1&amp;2</b>
<b>Time:</b>	<b>1230 - 1245 hours</b>

## **CARDIAC REHABILITATION SERVICE REDESIGN TO ADDRESS THE CHALLENGES OF A CHANGING HEALTH ENVIRONMENT**

Julie S Smith<sup>1,2</sup>, Julie Redfern<sup>3</sup>, Jacquie Garton Smith<sup>1, 4</sup>, Tom Briffa<sup>5</sup>, James Rankin<sup>1</sup>, Andrew Maiorana<sup>1, 6</sup>

1. RPH, Perth, WA, Australia

2. The Heart Foundation, Perth

3. The George Institute for Global Health, University of Sydney, Sydney

4. Cardiovascular Health Network, DoHWA, Perth

5. The University of Western Australia, Perth

6. Curtin University, Perth

**Background/rationale:** The WA public health system is currently undergoing unprecedented changes, with the commencement of Activity Based Funding, new service plans and a new tertiary hospital. To address these challenges in the absence of additional staff resources, Royal Perth Hospital implemented an alternative model of cardiac rehabilitation for cost effective secondary prevention (ACCES) from April 2013. This aimed to increase the proportion of patients with acute coronary syndromes receiving core components of CR; assessment, individualised plan, education, follow-up

**Methods/design:** A quality improvement framework was employed to guide service redesign. Surveys were conducted pre and post model implementation with ward staff (44,21) and patients (74,66). Patient calls (11,8) and focus groups (11,8) occurred. Feedback was obtained from CR staff (8), management (3), external CR services (20), GPs (18).

**Outcomes:** A daily automated post discharge referral list was generated from the CR database to CR staff. Ward staff took over referring inpatients for CR supported by a new patient needs assessment tool, allowing the CR nurse more time for outpatient follow-up including routine structured phone calls to patients within one week of discharge and at 3 months. Support from management was a change enabler whilst challenges included project timelines, staff turnover, resistance and competing demands.

**Implications for practice:** The ACCES model has potential to be replicated to improve CR service efficiency.

**Conclusions/key messages:** Reviewing CR practices identifies where agreed service efficiency can be achieved. However, engaging staff in change management requires leadership, significant time investment, ongoing reinforcement to staff and strong support from management.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Concurrent Free Paper Sessions – Service Delivery</b>
<b>Room:</b>	<b>Level 1, Sirius 1&amp;2</b>
<b>Time:</b>	<b>1245 - 1250 hours (Mini Oral)</b>

## **A NEW CARDIAC REHABILITATION NEEDS ASSESSMENT TOOL (CRNAT) TO SUPPORT CLINICAL SERVICE REDESIGN**

Julie S. Smith<sup>1, 2</sup>, Jacque Garton Smith<sup>1,3</sup>, Julie Redfern<sup>4</sup>, Tom Briffa<sup>5</sup>, James Rankin<sup>1</sup>, Andrew Maiorana<sup>1, 6</sup>

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5. *The University of Western Australia, Perth*
6. *Curtin University, Perth*

**Background/rationale:** Uptake of cardiac rehabilitation (CR) is influenced by referral processes and support for CR by nursing/medical staff. A CRNAT was developed and implemented at Royal Perth Hospital to engage ward nurses and GPs in CR promotion and delivery and to identify patient-centred preferences to guide post discharge CR.

The CRNAT was a component of service redesign associated with the alternative model of cardiac rehabilitation for cost effective secondary prevention (ACCES) project.

**Methods/design:** The CRNAT was developed using participatory action research methodology. Initial consultation occurred with: patients (n=10), GPs (n=8), CR (n=3) and other hospital staff (n=5). Three months after implementation, feedback was obtained from 18 staff to refine the tool.

Follow-up surveys were undertaken (>6 months after implementation) with hospital staff (n=21), GPs (n=10) and patients (n=66). Additional patient feedback was obtained: focus groups (n=8), phone interviews (n=14).

**Outcomes:** Follow-up surveys revealed 43% of patients recalled receiving the CRNAT, with 93% of these finding it useful and 64% reported presenting the tool to their GP. 50% of GPs surveyed reported that patients attended appointments with the CRNAT. All GPs receiving the CRNAT and 62% of ward nurses indicated it encouraged discussion about CR.

**Implications for Practice:** Needs assessment tools help establish patients' preferences for CR and engage health professionals but require substantial support to implement.

**Conclusions/key messages:** Patients, staff and GPs indicated the CRNAT was useful, however self-reported utilisation was low. Strategies to increase utilisation of new CR tools need to be explored in conjunction with all stakeholders.

**Day:** Saturday, 23 August 2014  
**Session:** Concurrent Free Paper Sessions – Service Delivery  
**Room:** Level 1, Sirius 1&2  
**Time:** 1250 - 1255 hours (Mini Oral)

## **CARDIAC REHABILITATION PROGRAMS, A CLOSER LOOK: A NATIONAL SURVEY OF CARDIAC REHABILITATION COORDINATORS**

Rosemary Higgins, Alun Jackson, Barbara Murphy, Michael Le Grande, Michelle Rogerson, Alison Beauchamp

*Heart Research Centre, The Royal Melbourne Hospital, VIC, Australia*

**Introduction:** While there are almost 350 cardiac rehabilitation programs operating in Australia, there is limited data available to enable comparison of programs. The aim of this study was to investigate and document current practice in a) CR in program format and delivery; b) program staffing and c) referral and uptake by patients.

**Methods:** An online survey of the coordinators of Australia's CR programs was undertaken. To date responses have been received from more than 180 coordinators. The survey asked about program format and content, staffing, and patient load.

**Results:** The average number of CR program sessions delivered was 9 (range 2-26). Group exercise and education sessions were provided by the vast majority of CR programs. A significant minority of CR programs provided individualised education (42.9%) or exercise (24.5%) sessions. Other support options included telephone support (57.7%) and home visits (26.4%). CR programs received an average of 25 new referrals per month and 14 new patients, translating into a 56% attendance rate overall. The range of multidisciplinary staff involved in CR programs, attendance rates, staff patient ratios and CR co-ordinator EFT will be presented separately for programs in metropolitan, rural and remote regions.

**Conclusion:** There is evidence of a range of models of care provided by CR programs in Australia. CR programs vary widely in length, content and format. Considerable variation is evident among similar sized programs, in terms of uptake of referral and staff patient ratios. Implications of the study for program benchmarking will be explored.

**Day:** Saturday, 23 August 2014  
**Session:** Concurrent Free Paper Sessions – Service Delivery  
**Room:** Level 1, Sirius 1&2  
**Time:** 1255 - 1300 hours (Mini Oral)

### **CARDIAC REHABILITATION DECREASES THE RISK OF HOSPITAL READMISSION: IMPROVEMENT IN HARP CHRONIC CONDITION RISK CALCULATOR SCORE POST COMPLETION OF CARDIAC REHABILITATION**

Melanie McAndrew, Stephen Woodruffe, Steve Bartlett Robyn, Williams Jillian Grice  
Madonna Prenzler

*Ipswich & West Moreton Cardiac Rehabilitation Service, Ipswich, QLD, Australia*

The Hospital Admission Risk Program (HARP) Chronic Condition Risk Calculator is used to measure predictable level of risk (score) for acute presentation in the next 12 months for people with chronic conditions.

Staff of the Ipswich Cardiac Rehabilitation Service chose to measure the change in this risk score from admission through to discharge from Cardiac Rehabilitation (CR), to assess for any decrease in risk of admission to hospital following CR .

**Subjects:** Participants of the 6 week outpatient CR program were included in the study, which was conducted between April 2013 and March 2014. During the eleven months of the study the HARP Chronic Condition Risk Calculator was completed on admission (168 subjects) and completion (96 subjects). This data was entered into a simple SurveyMonkey ® survey for data analysis. If patients did not complete the CR program a discharge Risk Calculator was not done.

**Results:** Post discharge from CR, subjects identified as “Low Risk” increased from 70.83 % (119) at admission to 90.6 % (87) on completion. A reduction in Medium risk from 27.98% (47) to 9.3% (9) was found. High and Urgent scores on admission were 0.6% (1) each and were not evident in completion results. Through observation of discharge assessments the greatest improvement was found in reduction of risk factors, self management and readiness to change.

**Conclusions:** Completing CR results in the a marked reduction in hospital readmission risk using the HARP Chronic Conditions Calculator as a predictor.

**Limitations:** Data on actual readmission rates to hospital were not available.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Concurrent Workshop</b>
<b>Room:</b>	<b>Level 1, Endeavour 1</b>
<b>Time:</b>	<b>1400 - 1530 hours</b>

## **CARDIAC REHABILITATION: ADVANCED EXERCISE PRESCRIPTION FROM THE FRAIL TO THE FIT**

The purpose of this workshop is to further develop the knowledge and skills of CR professionals delivering CR exercise programs. The focus of this session will be on “advanced” and/or “challenging” clinical cardiac conditions/situations. The presenters aim to cover clinical cases at each end of the “spectrum” of functionality; from the frail and significantly deconditioned, to those with a high level of pre-morbid fitness and strength. Clinical cases/situations to be covered include:

At the low end...

- Patients with very low fitness/strength
- Patients at high risk of falls, poor balance
- Patients with significant mobility/orthopaedic limitations
- Patients with ongoing cardiac symptoms

At the upper end...

- Patients with very high fitness/strength (compared to comparable CR norms)
- Patients who identify goals at significantly elevated levels to comparable CR norms, e.g. return to long distance running, competitive sport

This workshop will include direct information delivery, small group work and larger group discussions.

Emerging clinicians, established practitioners and experienced professionals are encouraged to attend to share your knowledge and experience.

<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Concurrent Workshop</b>
<b>Room:</b>	<b>Level 1, Endeavour 2</b>
<b>Time:</b>	<b>1400 - 1530 hours</b>

### **CULTURAL ISSUES/SAFETY**

Many indigenous groups share a striking commonality: a significantly shorter life expectancy when compared to non-indigenous compatriots. This disadvantage for indigenous persons holds true even for high income countries, including Australia, Canada, New Zealand and the United States.

Cardiovascular disease (CVD) is the primary factor explaining this discrepancy. In turn, multiple studies have revealed that modifiable risk factors are responsible for a large number of premature deaths attributable to CVD. That is, narrowing the health gap is an attainable goal. This workshop will attempt to pose some challenging questions on the what, why and how of indigenous CVD.

**Day:** Saturday, 23 August 2014  
**Session:** Concurrent Workshops  
**Room:** Level 1, Sirius 1&2  
**Time:** 1400 - 1530 hours

### **MIXING IT UP: INCORPORATING TAI CHI MOVES INTO CARDIAC REHABILITATION**

Tai Chi has many health benefits which include:

- Improved balance
- Reduced risk for falls
- Pain alleviation
- Improved sleep
- Overall wellness



<b>Day:</b>	<b>Saturday, 23 August 2014</b>
<b>Session:</b>	<b>Plenary</b>
<b>Room:</b>	<b>Level 1, Endeavour 1&amp;2</b>
<b>Time:</b>	<b>1600 - 1640 hours</b>

### **THE GREAT DEBATE: REHAB FOR HOMER SIMPSON HOME TELE-HEALTH VERSUS TRADITIONAL OUTPATIENT**

Homer Jay Simpson, male, aged 40 something, with an anterior ST elevated myocardial infarction (STEMI) treated with thrombolysis. He is asymptomatic and post-discharge angiogram shows 70% mid-left anterior descending stenosis and an ejection fraction of 47%. Works as a Safety Inspector at the Springfield Nuclear Power Plant. Married to Marge and father to Bart, Lisa and Maggie. Devoted to his family. Risk factors include: obesity, inactive (watches too much TV) and heavy-drinker. Lives by the motto "You tried your best, and you failed miserably. The lesson is: never try." Homer is an ideal candidate for traditional comprehensive facility-based cardiac rehabilitation or is he? The benefits of traditional cardiac rehabilitation are compelling and include lower mortality, fewer readmissions to hospital and improved quality of life. Moreover, these benefits continue to apply in the context of contemporary early reperfusion therapy and preventive pharmacotherapy for acute coronary syndrome. However, the evidence for home-based telehealth cardiac rehabilitation is persuasive. Meta-analysis show that post myocardial infarction patients can benefit from both cardiac rehabilitation and preventive medicines as part of a lifelong secondary prevention strategy independent of age, gender, clinical status and program location. Essentially, contemporary cardiac rehabilitation services need to be closer and more accessible to all eligible patients, whether locally or remote, leading to the provision of home-telehealth. Homer's predisposition and approach to life in general may be better suited to a home-based approach? The session will conclude with a vote by the audience as to the preferred cardiac rehabilitation program for Homer.

**Day:** Saturday, 23 August 2014  
**Session:** Plenary  
**Room:** Level 1, Endeavour 1&2  
**Time:** 1700 - 1710 hours

**FINAL WORD FROM A CR PATIENT: PATIENT REFLECTION**

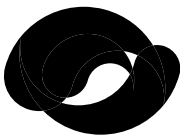
Tanya Hall

*CEO, Arrhythmia Alliance Australia, VIC, Australia*

Arrhythmia Alliance Australia and hearts4heart CEO- Tanya Hall will share her experience as a patient with heart disease and will discuss the work she is now actively involved in support, advocacy and her personal mission to raise awareness, promote better understanding, diagnosis, treatment and quality of life for those affected by heart rhythm disorders (cardiac arrhythmias).



# POSTER ABSTRACTS



ACRA  
2014  
24TH ANNUAL SCIENTIFIC MEETING

## POSTER 1

### RISK FACTORS FOR DEPRESSION FOLLOWING AN EPISODE OF ACS: A SYSTEMATIC LITERATURE REVIEW

Jo Crittenden<sup>1</sup>, Gavin Leslie<sup>2</sup>, Sean D Hood<sup>3</sup>, Patricia M Davidson<sup>4</sup>

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3. Dept of Psychiatry, University of Western Australia, Perth, WA, Australia

4. School of Nursing, Johns Hopkins University, Baltimore, MD, USA

**Introduction:** The risk factors for the development of depression in patients following an episode of ACS have not been fully described. The objective of this review was to identify risk factors from the literature and critically evaluate the evidence base in order to develop a risk assessment tool.

**Methods:** A search of the literature was conducted dating from January 1990 to January 2010 using established medical databases and manual searching methods. To be included in the review, articles needed to be published in English, be a primary research article using quantitative methodology and report results of risk factors for depression obtained from prospective data or correlations obtained from cross-sectional data. The Oxford Centre for Evidence-based Medicine Levels of Evidence (2009) was used to critically appraise the articles.

**Results:** A total of 1,887 full-text papers were assessed and 1,860 were excluded on eligibility and methodological grounds. Twenty-seven articles, describing 24 studies, met the inclusion criteria. In total 50 risk factors were described in the literature. Following grading 13 risk factors were found to be highly relevant to the development of depression post ACS. The strongest evidence was found for a past history of depression, the presence of depressive symptoms during admission, and recent negative life events prior to ACS episode.

**Conclusion:** Identifying the presence of risk factors for depression is a novel approach which allows high risk groups to be supported appropriately throughout their recovery period.

## POSTER 2

### IDENTIFYING ACS PATIENTS AT RISK OF DEPRESSION: PRELIMINARY DEVELOPMENT OF A QUESTIONNAIRE FOR USE IN THE ACUTE CLINICAL SETTING

Jo Crittenden<sup>1</sup>, Gavin Leslie<sup>2</sup>, Sean D Hood<sup>3</sup>, Patricia M Davidson<sup>4</sup>

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4. School of Nursing, Johns Hopkins University, Baltimore, MD, USA

**Introduction:** Depression is an important comorbid diagnosis in Acute Coronary Syndrome (ACS). Early detection of depression risk will allow psychological support to be directed to those who may benefit the most. This research project aimed to develop a brief depression risk assessment instrument for use by nurses in hospital.

**Methods:** The Depression Risk Assessment Questionnaire (DRAQ) was developed using a four step approach. 1. Literature were searched for studies identifying risk factors for depression in ACS samples then graded for quality of evidence. 2. Comprehensiveness and content validity of the DRAQ was assessed by a panel of eight experts 3. The refined DRAQ was tested for internal consistency, reliability and temporal stability in a sample of 220 ACS patients. 4. Qualitative acceptability of the DRAQ was established in a small survey of study participants.

**Results:** Thirteen risk factors were initially identified as highly relevant to developing depression. Following assessment of the comprehensiveness and content validity, nine questions were retained. The internal consistency of the DRAQ was calculated using the Cronbach's coefficient alpha based on raw (0.71) and standardized (0.68) variables. Temporal stability was assessed using the kappa statistic with results indicating 'fair agreement' (0.47) to 'excellent agreement' (1.00). Eleven patient participants reviewed the acceptability of the DRAQ and reported questions were clear, relevant and appropriate.

**Conclusion:** This project has developed a preliminary tool with acceptable psychometric properties which could be used by nurses to help screen for the potential development of depression amongst ACS patients.

## POSTER 3

### PERCEIVED BARRIERS AND FACILITATORS RELATED TO SCREENING FOR DEPRESSION IN A CORONARY CARE UNIT

Jo Crittenden<sup>1</sup>, Gavin Leslie<sup>2</sup>, Sean D Hood<sup>3</sup>, Patricia M Davidson<sup>4</sup>

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4. School of Nursing, Johns Hopkins University, Baltimore, MD, USA

**Introduction:** Although it is recommended that formal screening procedures for depression be integrated into clinical practice this remains a challenge with little guidance available on how to translate the evidence into practice. This qualitative research study explored the barriers and facilitators to depression screening in a CCU as perceived by medical and nursing staff.

**Methods:** Ten members of clinical staff with varying professional roles and experience were recruited to the study. Data were obtained from ten semi-structured, individual interviews. A Thematic Framework was used to analyze the qualitative data.

**Results:** In total 23 themes and sub-themes were identified from the data. Interpretation of the data resulted in the identification of 12 major issues related to depression screening in the CCU. Issues related to current practice included a lack of a systematic approach to identifying depression and poor access to specialized psychiatric support services. Major barriers to screening included perceived time constraints, staff's lack of mental health related skills and lack of specific knowledge regarding depression in cardiac patients. Staff identified four requirements for change: that screening must lead to improved patient outcomes and a management plan; that a strong evidence base was required to underpin change; further staff education was required; a change facilitator was essential.

**Conclusion:** Important insights into the context of practice can be gained from qualitative data collected at individual hospitals. The findings from this study have informed further qualitative research being conducted in the department leading to an integrated model of depression screening and management

## POSTER 4

### EXPLORE POST CABG PATIENT'S PERCEPTION ON BENEFIT OF CARDIOTHORACIC HOME COUNSELLING

Sarjit Johal, Azran Ahmad

National Heart Institute, Kuala Lumpur, Malaysia

**Introduction:** This first phase of cardiac rehabilitation will be towards a gradual progression to exercise, education or counselling on exercise and diet which covers risk modification with life style changes to reduce mortality rate. In this we are going to look into the patient's perception on cardiothoracic counselling using a booklet.

**Methods:** Sample size is around 6 to 12 participants collected in National heart Institute base on volunteer sampling, with the exclusion criteria of unable to speak English, long stay in ICU more than 5 days, patients that has been treated by students. Patient will be interviewed within 30 to 60 minutes using a semi structured interview questions.

**Results:** 67% had gave a positive perception and comments on the counselling with using the booklet this include saying it is beneficial, its educational, gives confidence and independence, and creating awareness .The other 33% had comment that they were confuse on the medical terms used in the booklet and preferred more pictures, they also requested longer counselling time this will be the negative perception towards the booklet and the counselling.

**Conclusion:** This study is proven that counselling is beneficial and important prior to patients that are going to be discharge after surgery. In certain area in the study that can be improve further like the quality of sample and language use. This will enhance the outcome to be more accurate and the validity to use this method in other cardiothoracic setup.

## POSTER 5

### SCREENING, REFERRAL AND TREATMENT FOR DEPRESSION IN PATIENTS WITH CORONARY HEART DISEASE

Stephen J Bunker<sup>3</sup>, Maree Branagan<sup>1</sup>, David M Colquhoun<sup>2</sup>, David M Clarke<sup>4</sup>, Nick Glozier<sup>5</sup>, David L Hare<sup>6</sup>, Ian B Hickie<sup>5</sup>, James Tatoulis<sup>1</sup>, David R Thompson<sup>7</sup>, Geoffrey H Tofler<sup>8</sup>, Alison Wilson<sup>1</sup>

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5. Brain and Mind Research Institute, University of Sydney, Sydney, NSW, Australia
6. University of Melbourne, Melbourne, Vic, Australia
7. Cardiovascular Research Centre, Australian Catholic University, Melbourne, Vic, Australia
8. Royal North Shore Hospital, University of Sydney, Sydney, NSW, Australia

**Introduction:** Depression is an important independent risk factor for coronary heart disease (CHD). A review of evidence around depression in CHD patients was undertaken by the National Heart Foundation of Australia (NHFA). As a result of recommendations made a practical depression screening tool to facilitate the screening of CHD patients for depression was developed.

**Methods:** An expert working group reviewed new evidence in this area. Literature searches used key search phrases, including depression, anxiety, acute coronary syndromes, adherence, treatment and screening. Recommendations were made for screening, referral and treatment based on this evidence [1]. The Cardiac Society of Australia and New Zealand and the Royal Australian and New Zealand College of Psychiatrists have endorsed the content.

**Results:** The prevalence of depression is high in patients with CHD and it has a significant impact on the patient's quality of life, adherence to therapy, and effect on prognosis.

A simple tool for initial screening, such as the Patient Health Questionnaire-2 can be incorporated into usual clinical practice with minimal interference, and may increase uptake of screening. A depression screening tool has been developed by the NHFA to facilitate screening for depression in CHD patients. This implementation tool provides easy access to the recommended screening questionnaires for health professionals.

**Conclusion:** The benefits of screening for and treating depression in CHD patients include improved quality of life, improved adherence to other therapies and potentially improved CHD outcomes. This screening tool is designed to aid routine screening for depression in CHD patients.



## POSTER 6

### EFFECTIVE USE OF SECONDARY PREVENTION DATA

Karice K Hyun<sup>1,2</sup>, Tom Briffa<sup>3</sup>, Lis Neubeck<sup>2,4</sup>, David Brieger<sup>2,5</sup>, Julie Redfern<sup>1,2</sup>

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4. *Charles Perkins Centre, Camperdown, NSW, Australia*
5. *Concord Hospital, Concord, NSW, Australia*

**Background/rationale:** In Australia, we lack national data for outpatient cardiac secondary prevention programs, preferring individual sites to collect data for basic reports on the number of referrals and attendance.

**Aim:** To inform clinicians as to the importance of collecting high quality data and improving the efficiency of its use.

**Methods:** Improve data quality. To understand the data, creating a dataset that is easy to analyse is fundamental. To create such dataset:

- Avoid entering free text, and categorise them instead. E.g., for diagnoses, allocate numbers for major diagnoses to reduce variation of responses.
- Avoid rounding decimals. The decimal places improve the accuracy of the results.
- Keep a consistent method of data collection.
- Regularly audit for accuracy and completeness. Data entry errors and/or missing values will affect the result or limit the number of observations that can be analysed.
- Use of data

The data can be analysed to find characteristics of patients who do or do not attend the secondary prevention programs, and to derive key performance indicators (KPIs) such as comparing clinical outcomes after discharge between the attendees and non-attendees of a rehabilitation program.

**Implications for practice:** Collecting and understanding high quality data can help increase the rate of attendance, build the case for quality improvement measures derived from an examination of KPIs and the effect of the service.

**Conclusions/Key message/s:** Data should be analysed for clinical, research and policy purposes. From the data, impact of secondary prevention service can be justified, and further, help receive adequate funding.

## POSTER 7

### WHAT EDUCATION IS PROVIDED TO THE HEART FAILURE PATIENT IN THE RURAL SETTING: A SYSTEMATIC REVIEW

Jo Leonard

*MHLD, Wagga Wagga, NSW, Australia*

**Introduction:** Heart failure is a major global problem. Readmissions rates are increasing and the economic and societal costs are rising. However, up to two thirds of hospitalizations may be preventable. Education programs have been shown to reduce readmission rates, improve quality of life and to decrease mortality. Rural patients are particularly isolated and have a greater burden of disease than those living in metropolitan areas.

**Methods:** A standard systematic review process was followed. We searched electronic database, including Medline, Cinahl, Joanna Briggs, Cochrane and the rural database. Search terms included “Heart failure; education; rural; remote.” Quality of papers was determined through the use of CASP tool.

**Results:** Only four papers fulfilled the inclusion criteria, including 1086 participants with heart failure. Three studies were randomized controlled trials and one was a descriptive correlational study. The interventions used were telephone support, resources, individualized education, and counseling session. The other two studies utilized surveys completed by the participants, to determine their heart failure health literacy. These studies indicated that self-care behavior and symptom relief knowledge was lower in participants with heart failure and particularly those who lived alone or who were older. The majority of participants had mild cognitive impairment.

**Conclusion:** There was a lack of research about the education for heart failure patients in a rural setting. Improving access to education for patients in rural and remote settings could potentially reduce the burden on the health system and prevent avoidable readmissions

## POSTER 8

### IMPORTANCE OF REGULAR POST-ASSESSMENT IN A NEW HEART FAILURE REHABILITATION COURSE

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*Exercise Physiology Department, Canberra Hospital, Canberra, ACT, Australia*

**Background:** Chronic heart failure (CHF) is a complex syndrome that affects 1.5-2.0% of Australians and is characterised by progressive decline in ventricular function, low exercise tolerance and increased mortality and morbidity<sup>1</sup>. Best practice management of CHF involves specialised multidisciplinary care. Access to services for people with CHF in the ACT and surrounds has been limited. In June 2011 a multidisciplinary heart failure program was developed. The Heart Failure Rehabilitation Course (HFRC) is a 12 week program consisting of exercise sessions tailored to meet patients' needs and education sessions conducted by Heart Failure nurses and allied health professionals. Reassessment is conducted 3, 6 and 12 months post the completion of the program to assess self-management and adherence.

**Methods:** The six minute walk test (6MWT) is a tool used in the program to aid in exercise prescription, monitor patient progress and evaluate exercise intervention. The 6MWT is conducted pre program, post program, 3, 6 and 12 months post completion of the program. Data was collected from 23 patients and analysed using Microsoft Excel.

**Outcomes:** 6MWT results indicated that an average improvement of 78 metres was obtained at the end of the course, 83 metres at 3 months, 92.5 metres at 6 months and 83 metres at 12 months.

**Implications for Practice:** Because CHF is a progressive condition that is characterised by periodic acute exacerbations, regular assessment of symptoms and adherence to lifestyle changes, such as physical activity is necessary.

**Conclusions:** Continued resources are necessary to maintain a coordinated, systematic approach to quality patient care.

## POSTER 9

### **THE 6 MINUTE WALK TEST IN CARDIAC REHABILITATION AND DIFFERENCES BETWEEN SURGICAL AND NON-SURGICAL POPULATIONS**

Caitlin Patat, Margaret Flaherty, Sarah McGrath  
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In the ACT, chronic conditions account for 80% of the total burden of disease and injury, with cardiovascular disease being one of the leading contributors<sup>1</sup>. The multidisciplinary cardiac rehabilitation (CR) program at The Canberra Hospital (TCH) comprises of Cardiac Nurses, Exercise Physiologists, Physiotherapists, Psychologists and Dietitians. The program provides education, exercise and counselling to a varied cardiac population. The program aims to empower patients and promotes self management <sup>1</sup>. Patients attend the program twice weekly for 6 weeks.

The six-minute walk test (6MWT) is a tool recommended to guide exercise prescription, monitor patient progress and provide patient reassurance<sup>2,3,4</sup>. The 6MWT is a sub-maximal test of aerobic capacity<sup>5</sup>. It is the safest, easiest, most tolerated, and most functional assessment of cardiovascular fitness compared with other walk tests<sup>6</sup>, therefore it is the preferred test for CR.

The 6MWT accurately and independently predicts morbidity and mortality <sup>6</sup> and provides useful data for health professionals to identify areas of the program that require development. The minimum important difference in the 6MWT is estimated as 54m, with 95% confidence limits of 37m - 71m <sup>7</sup>. This information assists in determining how patients in CR at TCH are progressing, and whether or not improvements made are meaningful.

## POSTER 10

### **THE COURAGE AND CONVICTION OF BECOMING A NURSE PRACTITIONER: NAVIGATING THE RIGOURS OF THE NURSE PRACTITIONER CANDIDACY IN THE MODERN WORLD OF NURSING**

Margaret Ryan

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**Introduction:** This phenomenological study describes the lived experiences of Nurse Practitioner Candidates on their journey to becoming Endorsed Nurse Practitioners. The aim of the research

- To understand the motivation underpinning the desire to be a nurse practitioner candidate.
- To understand the navigation process necessary to undertake the candidacy.
- To begin to develop a process of guiding and supporting future candidates in a rigorous, supportive and trustworthy method.

**Methodology:** Interpretive phenomenology is the research method proposed in this research. Edmond Husserl's phenomenology (1913) and Edith Stein (1891-1942) approach to phenomenology and empathy have been used to underpin this project.

A purposive convenience sample of ten participants was Nurse Practitioner Candidates to understand the trajectory and journey of their candidacy. The second set of participants, also purposively sampled was ten Endorsed Nurse Practitioners who had already navigated the rigours of becoming endorsed. Purposive sampling was used so that a selected sample could be identified which was 'information rich'.

**Data Collection and research method:** Data collection aims to draw out the understandable meanings of the participant's experience and narration is one of the oldest forms of storytelling (Richardson, MacLeod, Kent, 2011) . By its very nature phenomenology is a science that questions how or in what way we experience the world that we live in (van Manen, 1991). By asking open ended-questions this method aims to draw the understandable meanings of the participant's experiences and the 'essence' of the experience.

**Ethical approval:** This research project requires the approval of Monash Medical Centre Ethics Committee.

# NOTES

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