First Annual GV Health Research Fair (1st GVHARF) Abstracts

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Location: GV Health and The University of Melbourne, Graham Street, Shepparton
Inauguration and acknowledgements

Dr Md Rafiqul Islam
Secretary, GV Health Annual Research Fair

Dear participants,

Welcome to the GV Health’s 1st Annual Research Fair in Shepparton!

Improving regional health research and producing good translatable innovations in health care delivery are a priority for GV Health and our partners. This is also one of the top Federal and State Government strategic priorities for the next 20 years. We all know that local and regional health matters are under researched and need to be showcased.

We are delighted to invite you therefore, to the GV Health ‘Annual Research Fair’. This event is to be held on 20 July 2016 from 9.00am to 5.00pm. This a truly local and regional health research showcase and will be held at two sites: Elsie Jones Education Centre on the Goulburn Valley Health premises and across the road at the lecture theatres of the The Department of Rural Health premises, The University of Melbourne, Shepparton campus.

I acknowledge the country, ownership, rights and contribution of the traditional owners of this land upon which we stand and celebrate our health research today.

I would like to offer special thanks to our invited speakers Professor Ingrid Winship, Professor David Story, Professor Daryl Pedler, Professor Lisa Bourke, Associate Professor Irene Blackberry and Mr Kemal Sedick. All these honourable speakers are delivering significant keynote speeches on several contemporary clinical and social issues in health. I would like to offer them a warm welcome. I express my sincere thanks and gratitude to the de facto research support team at GV Health, Ms Donna Campbell, Ms Bronwyn Brown and Ms Jerry Tumney who have gone out of their way to help manage the event.

I am proud to acknowledge the financial sponsors for this Research Fair namely, Rumbalara Aboriginal Cooperative Limited, Shepparton; La Trobe University, Tatura Milk, Murray Primary Health Network and the University of Melbourne.

It has been a significant effort from the whole team; A/Prof Iyengar and I are grateful for the opportunity to showcase local research at this important, ‘first of a kind’ milestone event for this region.

I gratefully acknowledge the contribution of the members in the scientific committee, the organizing committee and GV Health media department staff in helping us get this research showcase set up.

I am grateful to the abstract review panel that has provided detailed and insightful reviews on all the proffered abstracts.

I acknowledge our community health sector staff and leaders, GV Health Foundation and Murray PHN for their relentless support towards ensuring the success of this event. I must extend my sincerest thanks and gratitude to all Divisional Clinical Directors and Clinical Directors, nursing and allied health leaders from GV Health for their academic and other contributions to this special day. I acknowledge and appreciate the sponsorship and support we have had for this research fair from all GV Health executives and other governance leaders.

We have some excellent scholars chairing/co-chairing the research fair sessions or delivering plenary talks and providing scientific input.

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Dr Md Rafiqul Islam
Director of Research
GV Health
Foreword

Associate Professor Vasudha Iyengar
Chair, GV Health Annual Research Fair

My dear fellow researchers and participants

I warmly welcome you all to this very special and local research showcase. It gives me great pleasure to say that this event is truly a start better research advocacy for and produce deep scientific thought and aspiration of the highest calibre. This engenders hope. This fair is set to inspire and influence more than just the participants of the day.

Health services and clinical research that result in tangible and translatable clinical practice changes for the benefit of our whole patient community is often a challenging exercise. This is especially so in the rural and regional setting. Funding tends to be focused towards Metro achievements and projects. Interest in regional research however has increased in OECD countries owing to the cost and other burdens of chronic co morbid diseases that are borne by various communities and hospitals. We all know we are getting older, bigger, less mobile, afflicted by various unsavoury ailments that last a lifetime and spoil the quality of our contributory and vigorous lives.

I do apologise for reminding everybody about these regrettable health issues that afflict our full realisable potential as humans especially in the country ‘regions’. These issues are magnified within country Australian regions like ours for various well known socio economic and geographic reasons.

Regional research priorities have traditionally been under-represented at high end political and national levels, therefore creating the inevitable gaps in health outcomes.

This research fair may reopen or boost existing avenues for rigorous regional research certainly in our own region and possibly neighbouring ones too. I am of the most sincere hope that it will provide welcome opportunities for integration across professional disciplines and endorse a continuum concept of collaborative healthcare delivery. I am also hoping it reinvigorates the dialogue and goal setting around closing that famous health gap between traditional owners of this land and more recent arrivals (more about which Kemal Sedick will present later).

This research fair should provoke clinical and other health service change with focused if rowdy debate; I hope you will all push ahead with creative ideas and tense arguments around progress, goal setting and the timely achievement of better health objectives for all of us.

A well oiled and provoking public debate is all the better for the evidence that supports it and will surely fuel a better health service. Such noisy but productive public talk also helps sustain safer, well governed clinical practice for our own people in our health services.

This research fair should also hopefully generate serious debate around the health needs, inequities and problems of our particular mix of cultural diversity, gender and other migrant and refugee issues. We should see discussions around the ‘need of the hour’ best practices that we so desperately need for all the people of the myriad origins and cultures that form our complex Shepparton community.

We received 66 abstracts for the fair despite the very short notice for contribution. It was humbling to see such a profound response to this first time event. The work was of such a quality as to leave all abstract reviewers truly astounded. It is both stunning and validating to know that we have such intellectual thirst and vigour amongst us.

This Annual Research Fair programme has many offerings from world class professorial and other scholars, great oral and poster presentations from highly reputed clinical specialists and other contributors. I take the opportunity to applaud all those early and mid career clinicians/researchers who have bravely fronted up with their efforts for the day.

I am most grateful to all our staff, teams, managers, executives, collaborators, academics, external partners and sponsors and look forward to meeting you during the GV Health’s 1st Annual Research Fair on the July 20, 2016.

Associate Professor Vasudha Iyengar
Chief Medical Officer
GV Health
Scientific Committee
1. A/Professor Vasudha Iyengar, GV Health
2. Dr Manny Geaboc, GV Health
3. Dr Mark Harris, GV Health
4. Professor Lisa Bourke, the University of Melbourne
5. Professor Julian Wright, the University of Melbourne
6. A/Professor Jane Freemantle, the University of Melbourne
7. A/Professor Helen Malcolm, the University of Melbourne
8. Dr Helen Haines, the University of Melbourne
9. Dr Daniel Terry, the University of Melbourne
10. A/Professor Ravi Bhat, GV Health
11. Dr Arup Bhattacharya, GV Health
12. Dr Zee Wan Wong, GV Health
13. Dr Dan Garrick, GV Health
14. Dr Aidarus Farah, GV Health
15. Dr Vivek Phutane, GV Health
16. Dr Dong Chen, GV Health
17. Dr Usha Kolandaivel, GV Health
18. Dr Md Rafiqul Islam, GV Health
19. Dr Bruno Giorgio, GV Health

Organising Committee
1. Associate Professor Vasudha Iyengar
2. Dr Md Rafiqul Islam, GV Health
3. Dr Beige Pureau, GV Health
4. Ms Michelle Frenkel, GV Health
5. Ms Carmel Johnson, GV Health
6. Ms Donna Campbell, GV Health
7. Ms Bronwyn Brown, GV Health
8. Ms Jerry Tumney, GV Health

Abstract Review Panel
1. A/Professor Jane Freemantle, the University of Melbourne
2. Dr Daniel Terry, the University of Melbourne
3. Dr Vivek Phutane, GV Health
4. A/Professor Vasudha Iyengar, GV Health
5. Dr Md Rafiqul Islam, GV Health
6. Ms Gloria Kilmartin, GV Health
7. Mr John Kilmartin, GV Health
8. Dr Manny Geaboc, GV Health
9. Dr Babak Tamjid, GV Health
10. Dr Abul Hasnat Milton, the University of Newcastle, NSW

Event Partnership
1. Rumbalara Aboriginal Cooperative Limited
2. La Trobe University
3. Tatura Milk
4. Murray Primary Health Network (Murray PHN)
5. The University of Melbourne
In the spirit of respect, I acknowledge the traditional owners of the land on which we are gathered and recognise all tribes of the Yorta Yorta nation.

In 2007, the Council of Australian Governments (COAG) made a commitment to ‘closing the gap’ in the life expectancy between Indigenous Australians and other Australians. In 2008 COAG set a range of targets across six priority areas of Aboriginal and Torres Islander disadvantage, including the health specific target of closing the gap in life expectancy. That target is to close the gap in life expectancy between Indigenous Australians and other Australians by 2031 where the life expectancy of Aboriginal and Torres Strait Islander people is about ten years lower than for other Australians.

The recent, ‘Closing the Gap – Prime Ministers Report 2015’ shows that while some improvements have been made most targets are ‘not on track’ to be met.

I believe that the collection and analysis of data is vital if the Gap is to be closed.

Data and the analysis of that data is important in the development of services and system responses to identified and emerging issues. The service configuration and workforce needed to meet the needs of community today and the emerging needs of community into the future is only possible if one understands the nature and the context of service delivery as represented by both qualitative and quantitative information and metrics.

One of the questions that I like considering is how do we develop the expertise in indigenous gerontology and neurophysiological rehabilitation that will be needed as Aboriginal and Torres Strait Islander peoples live to be older with a complex and significant range of presenting issues? Further, it must be considered whether we are able to deliver these services in a way that values their wisdom and cultural strength while addressing their physical, social, emotional and cultural needs and well-being in a way that respects their unique and powerful connection to land.

Another issue that occupies my thought is that if 1:4 women and 1:6 men have been sexually assaulted before the age of 18 then that means that there will be elders who have experienced this. Given the age that this is likely to have happened and the prevailing social context of those times, it is unlikely that they will have accessed or been offered appropriate supports for those traumatic experiences. Which all leads me to the question of what can I do to support the elders living in our facilities to have an exceptional quality of life through the provision of trauma informed supports and services?

Rumbalara Aboriginal Cooperative has recently published a research and discussion paper: CHANGING THE PARADIGM TO ‘CLOSE THE GAP’: Understanding the context of Aboriginal and Torres Strait Islander health and well-being to effect measurable change. We believe that this paper has the potential to change the way we think about the strategies we employ to deliver health, community services and education to Aboriginal and Torres Straits Islander peoples and we believe that we can achieve measurable and meaningful outcomes.

We are very excited about this piece of work and we believe that this work places Victoria in a leadership role in re-conceptualising the Closing the Gap agenda.

Our paper proposes that if you live with a condition for long enough then you will normalise that condition. We make the case that the community has become so used to living in sub-optimal conditions, that this has become the new norm, and that this encompasses physical, mental, cultural, spiritual, educational, and economic wellbeing. This is because of an historical environment of trauma and disadvantage that has been experienced by multiple generations who have normalised a state of being ‘unwell’.

RAC believes that the outcome of this is the tendency that community members engage late and disengage early from health and other services thus maintaining themselves at their normal level of ‘unwellness’.

RAC believes that this highlights the importance of care coordination and the need to preserve the engagement with individuals across multiple episodes of care and over extended periods of time while we work on re-setting their norms and their expectations of what health and wellbeing actually feel like. Further, we believe that this is the uniquely essential role of the Aboriginal Community Controlled Health and Community Services.
Keynote speech 2

Rural health research – perspectives from a clinician academic

Professor Daryl Pedler
Director, Rural Community Clinical School
Deakin University
Geelong, Victoria

Summary:
In common with most [almost all] clinicians I know who have become academics, I did so subsequent to acquiring clinical expertise. During my initial clinical experience [5 ½ years in small-town rural, procedural, General Practice (GP)], I developed interests in health professional education, preventive care and of the links between community and individual health.

At present, the Royal Australian College of General Practitioners (RACGP) defines general practice in the following manner: “General practice provides person centered, continuing, comprehensive and coordinated whole person health care to individuals and families in their communities” A General Practitioner, who is a Fellow of that College is, therefore, one of the providers of this care, as defined.

Over the years (mainly in rural locations), I have become progressively more interested in one or other components of this definition. My interest in health professional education led to a role as a GP and medical student educator, while my interest in preventive care led, ultimately, to sabbatical leave to explore the role of the GP in Health Promotion. Inevitably, this led to further study (a Masters in Public Health) and (later) a professional research doctorate.

Now, many years later – as a full-time university academic – I have teaching, research and managerial roles, plus the privilege of continuing (on a part-time basis) as a clinician. However, while it is my clinical interest and expertise that drives my research agenda, advice from university colleagues on approaches to implementing that agenda has helped significantly. The research priorities of the Department of Rural General Practice that I, currently, lead are Health Professional Education, GP-clinically-relevant Population Health and other issues of timely relevance.

Our department is less than four years old. In this presentation I will cover both aspects of my professional development as a clinician academic and some of the things we have learnt as a department. I will also outline the development of our research agenda, briefly review some of the projects underway and discuss how we are trying to develop a distributed network of teaching and research in general practice.

Keynote speech 3

Perioperative frailty

Professor David Story
Foundation Chair of Anaesthesia
Head of Anaesthesia, Perioperative and Pain Medicine Unit (APPMU), Melbourne Medical School
Director of Melbourne Clinical and Translational Sciences
The University of Melbourne, Melbourne, Victoria

Summary:
We found that one in five older surgical patients have complications and one in 20 die within 30 days of surgery. The 2010 UK National Confidential Enquiry into Patient Outcome and Death (NCEPOD) report on the elderly discussed assessing frailty, suggesting that this is another factor which should be considered when caring for elderly surgical patients. Frailty, like other things in life can be hard to define but vulnerability is an important factor: individuals with a diminished capacity to effectively compensate for external stressors, or more simply: easily broken. There is no consensus about how to diagnose frailty one way to consider frailty as deficit accumulation. A recent surgical study found that a simple 11-point frailty index correlated with both mortality and morbidity for all surgical specialties. One advantage of the cumulative system in addition to its quantitative side is when considering limitations on treatment is the frailest older people can no longer accumulate deficits (i.e. become more frail); the next insult will cause failure of the system (i.e. death).

Unfortunately we do not have a simple robust quantitative measure of frailty that can be done by those with limited training e.g. orthopaedic registrars. No matter how frailty is defined there is emerging evidence that it is an additional factor in assessing mortality risk as well as discharge destination for patients. In a study of ICU survivors with pre-hospital frailty Canadian researchers found that frail patients had greater disability and worse quality of life. Both these studies suggest that quantified frailty is an important consideration in advising patients and their families. Another retrospective study of 12,400 patients undergoing non-cardiac surgery examined the additive effect of functional limitation (defined as needing help with one or more activities of daily living) in preoperative risk assessment. The Authors concluded that Functional capacity was an independent predictor of mortality within each ASA class. Decreased albumin was, again shown to be an important independent predictor for mortality. This simple measure of functional limitation could be considered for the routine preoperative evaluation. Combining ASA, albumin, and assistance with activities of daily living may be an interim way forward.

Research into improving outcomes for frail patients and possibly decreasing frailty requires good planning to demonstrate the clinical effectiveness and cost effectiveness of interventions. The University of Melbourne has developed the Melbourne Clinical and Translational Sciences (MCATS) research support platform to assist researchers, including those based at Goulburn Valley Health, in the central elements of: biostatistics; health economics; data management; and research quality and integrity.
Keynote speech 5

Stepping Up Telehealth: using telehealth to intensify therapy among people with type 2 diabetes in rural and regional primary care

Associate Professor Irene Blackberry
Director of the John Richards Initiative
Rural Ageing Research
La Trobe University
Wodonga, Victoria

Summary:
Context and Aims
The majority of clinical care for people with type 2 diabetes (T2D) occurs in general practice. This pilot study examines the feasibility and acceptability of Stepping Up model of care supported by telehealth to intensify diabetes therapy among people with out-of-target T2D in rural primary care.

Methods
The pilot was conducted in 5 practices with 18 patients in rural Victoria and NSW. The telehealth intervention included general practitioner and practice nurse (GP/PN) training by webinar; patient education in structured self-monitoring of blood glucose and sharing data online; and three-way patient and health professional communication (patient/GP/Endocrinologist and/or CDE-RN) using an online data-sharing platform and video/phone consultation. A mixed-methods design was used to evaluate clinical, biochemical, psychosocial factors and barriers and facilitators over 6 months.

Findings
The model of care supported by telehealth is feasible and acceptable to health professionals and patients, overcoming geographic and financial barriers and increasing access to multidisciplinary care. It produced clinical, biochemical and empowerment benefits for people with T2D. Uptake of telehealth was variable and dependent upon IT skills and infrastructure among practices, professionals and patients.

Innovative contribution to policy, practice and/or research
This pilot built the capacity of GPs and PN to deliver evidence-based diabetes care in partnership with people with T2D, endocrinologists and CDE-RNs. Wider implementation of the model may be supported by embedding telehealth competencies into health professional training and accreditation programs, establishing a "telehealth coordination role" and providing financial incentives for all members of the healthcare team to participate.

Keynote speech 6

The divide between health and the social in rural health in Australia

Professor Lisa Bourke, Dr Christina Malatzky
Department of Rural Health
The University of Melbourne
Shepparton, Victoria

Summary:
The overlap between health conditions and social problems is increasing, crystallising in some of the most pervasive and serious issues confronting rural Australia. Yet the ability of health and social service professionals to effectively address these issues remains troublesome. This presentation explores the ‘disconnect’ between health and ‘the social’, arguing that our current approaches to, training in and thinking about health does not effectively connect health and social issues, resulting in poorer client/patient outcomes.

Using a hypothetical case of family violence, we analyse the relations between three central actors, namely rural consumers, health practitioners and rural health services. Using this case study, we argue that there are three underlying premises in health care that restrict the ability of these actors to connect and address patient needs. The first premise is the inflexibility of health services and systems to genuinely adapt to patient needs. The second premise underpinning health care is ‘sameness’ as it restricts attention to individual needs, stages of change and other psychosocial issues. Finally, the separation of the social and health into distinct spheres undermines patient-centred care. The paper suggests these discourses of inflexibility, sameness and separation of the social have generated a longstanding disconnect that constrains social and health care systems, thwarting the production of client-centred care.
As a result, this paper calls for flexibility of service delivery so that managers and practitioners can change the way they provide services to meet patient need. This paper also recommends changes in health systems so that services can be individualised and adapted to local community and patient needs. Finally, we call for connection of the social and health, beginning in health and medical education. We suggest that system-level change is required to provide client-centred, integrated and inclusive rural health care that recognises and addresses the social as a fundamental part of health. We also call on all actors in the health arena to advocate for the inclusion of ‘the social’ to make their work more rewarding and to reject commonly held beliefs that such change is beyond the scope of individual practitioners, managers and stakeholders.

**Keynote speech 7**

**EMR: the mixed digital age blessing**

**Associate Professor Vasudha Iyengar**  
Divisional Clinical Director, Surgery  
Chief Medical Officer, GV Health  

**Summary:**  
Electronic medical records are in to stay. Like Computers. Like Tablets. Like ever enlarging smart phones. Are digitalized records really a blessing or turning into a curse? Have they reduced or magnified our paperwork? Have they created better outcomes in patient care or simply created more tangles for everyday hospital workers? Is clinical handover safer because of the EMR or are simply able to track and trace and blame and shame more effectively? Are GP’s getting good discharge information from hospitals about their patients or a whole lot of printed gobbledygook on paper they have no time to read through? How has the EMR contributed to our busy lives as doctors and nurses and healthcare staff in hospitals. It is time to start reflecting on the pros and cons and looks at how we could better shape our digital EMR future specific to our need: clinicians and patients rather than simply make multinational companies more profits to develop more complicated versions of complex digital systems. It’s a business that W, the consumers need to take charge of.

**Keynote speech 8**

**Rural Research – Does it really matter?: A focus on mental health**  
**Associate Professor Ravi Bhat**  
Divisional Clinical Director  
Goulburn Valley Area Mental Health Services  
Goulburn Valley Health  
Shepparton, Victoria  

**Summary:**  
Research in Concise Oxford Dictionary is defined as, “the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.” What do we know about rural health? Rural Australians have shorter lives; rural Australians have higher levels of illness and disease risk factors, for example, they are more likely to die to heart disease; rural Australians are more likely to exposed to environmental disasters and thus its negative health consequences; male suicide rates in remote areas are about twice as high as in males from non-remote areas and so it goes. It would appear that facts are known. Access to healthcare in rural Australia is poor. This fact too is known. Is there anything else that we need to know? There are no new facts to be uncovered. The speaker will argue that rural research actually doesn’t matter.

**Keynote speech 9**

**Parkinson’s - the journey in Shepparton**  
**Dr Arup Bhattacharya**  
Divisional Clinical Director, Medical  
Goulburn Valley Health  
Shepparton, Victoria  

**Summary:**  
The introduction of a comprehensive Movement Disorder Service has brought considerable benefits to the Goulburn Valley region. The demand for this service was high and there was an unmet need. The care was fragmented – the medical care being provided by the visiting specialists. In between consultations, there was no access to specialists and phone advice was provided by Parkinson’s VIC. 

The commencement of a specialist Movement Disorder Nurse, multiple regional clinics and introduction of new monitoring systems and advanced therapies have established the service as a comprehensive service responsive to the needs of the patients, carers and relatives. Besides, clinical excellence, there has been a significant emphasis on education on a region wide scale. Multiple patient support groups have been set up in surrounding towns and the interest has been sustained by a programme of talks and informal support sessions. There has been a renewed vigour in the Allied Health Specialists to deal with the various Movement Disorders.

The effectiveness and responsiveness of the service have been measured in a survey which determined that the service was highly regarded and very well received by the community. Various opportunities have arisen to speak about the service and the model it follows. Local conferences have seen many eminent clinicians speaking to the community and the exceptional turnout has meant that the community is actively engaged.

The service has been a flag-bearer for a regional model of chronic neurological disease management. It provides a combination of inpatient and outpatient assessments, home visits, residential care facility consultations and telephone advice. The educational sessions have resulted in better overall care in the region for patients with Parkinson’s disease and other Movement Disorders.

We hope that this model will be replicated in other regional areas. We recognise the further potential of this service and the benefits that a high quality local service has meant to the region.
POSTER EXHIBITION

Elsie Jones Education Centre

Room 4
Goulburn Valley Health
Shepparton, Victoria

Poster 1: Abstract 2
Poster 2: Abstract 4
Poster 3: Abstract 5
Poster 4: Abstract 6
Poster 5: Abstract 8
Poster 6: Abstract 9
Poster 7: Abstract 10
Poster 8: Abstract 11
Poster 9: Abstract 12
Poster 10: Abstract 14
Poster 11: Abstract 17
Poster 12: Abstract 18
Poster 13: Abstract 19
Poster 14: Abstract 20
Poster 15: Abstract 23
Poster 16: Abstract 24
Poster 17: Abstract 29
Poster 18: Abstract 32
Poster 19: Abstract 33
Poster 20: Abstract 34
Poster 21: Abstract 35
Poster 22: Abstract 36
Poster 23: Abstract 38
Poster 24: Abstract 40
Poster 25: Abstract 41
Poster 26: Abstract 42
Poster 27: Abstract 43
Poster 28: Abstract 44
Poster 29: Abstract 45
Poster 30: Abstract 46
Poster 31: Abstract 47
Poster 32: Abstract 48
Poster 33: Abstract 49
Poster 34: Abstract 50
Poster 35: Abstract 51
Poster 36: Abstract 53
Poster 37: Abstract 54
Poster 38: Abstract 55
Poster 39: Abstract 56
Poster 40: Abstract 57
Poster 41: Abstract 58
Poster 42: Abstract 59
Poster 43: Abstract 61
Poster 44: Abstract 63
Poster 45: Abstract 64
Poster 46: Abstract 65
Poster 47: Abstract 66
Poster 48: Abstract 28

ORAL PRESENTATION

Elsie Jones Education Centre

Room 1
Goulburn Valley Health
Shepparton, Victoria

OP1: Abstract 37
OP2: Abstract 3
OP3: Abstract 27
OP4: Abstract 30
OP5: Abstract 39
OP6: Abstract 60

ORAL PRESENTATION

Elsie Jones Education Centre

Room 2
Goulburn Valley Health
Shepparton, Victoria

OP7 (1): Abstract 7
OP8 (2): Abstract 13
OP9 (3): Abstract 21
OP10 (4): Abstract 22
OP11 (5): Abstract 25
OP12 (6): Abstract 26
OP13 (7): Abstract 52
Plenary Session 1

LabMET at Goulburn Valley Health, a regional comparative experience

Dr Mark Harris
Chief Medical Information Officer and Clinical Director, Medicine
Goulburn Valley Health
Shepparton, Victoria

Summary:
Commonly measured laboratory variables can identify surgical patients at risk for major adverse events (death, unplanned intensive care unit [ICU] admission or medical emergency team [MET] response). We plan to test whether early notification of these variables (whether raw, grouped or weighted) to the treating surgical teams can reduce the risk of this identified cohort of having adverse events in a regional base hospital. The clinical course of these patients will be compared with control patients from the same institution who were identified as low risk. Data has already been collected at a university affiliated hospital where a previously validated multivariable model of derived risk has been established for individual and combined laboratory test sets. This data will be compared with our regional cohort. Potentially automated identification of high risk post-operative patients should help improve patient outcomes by reducing variability of clinical assessments particularly with frequent rotations of medical and nursing staff of differing skill sets and experience.

Plenary Session 2

The Philosophy of Ongoing Clinical Audits in the Women's Health Service At GV Health and the Value of Clinical Audits as a Small "r" Research Tool.

Dr Bruno Giorgio
Clinical Director, Obstetrics and Gynaecology
Goulburn Valley Health
Shepparton, Victoria

Summary:
Background
Webster’s Dictionary defines research as “Diligent inquiry or examination in seeking facts or principles; laborious or continued search after truth; as, researches of human wisdom; to research a topic in the library; medical research”. Clinical Audits which inquire and research the facts surrounding patient care, outcomes and best practices satisfy this definition for legitimate research and if conducted inside an institution will not generally require the added burden of Human Research Ethics approval.

Methods and expected outcomes
In the Women’s Health Service at GVH a sustained and systematic approach to Clinical Audits has been in action for almost three years. Auditors have been junior medical staff and senior midwifery staff. The selected topics have been assigned by complexity matching training and educational needs of the auditor and supervised by a Consultant. Topics for the audits are informed by recommendations from Perinatal and Gynaecological Mortality and Morbidity reviews, Consultants interest, perceived areas for clinical practice improvement, review of Clinical Practice Guidelines, outcomes which appear to be outside the norms and matters which have Primary or Public Health factors impacting on patient care. Some audits are repeated or expanded from one year to the next. Up to 10 such audits are presented annually.

Conclusions
The Audit presentations are ultimately “published” when circulated to all Medical and Midwifery Staff, and kept in the Department’s E Library and recorded in VIHMS Quality Activity section.

Plenary Session 3

Changing the Paradigm to Close The Gap

Mr Kemal Sedick
Chief Executive Officer
Rumbalara Aboriginal Cooperative Limited
Shepparton

Summary:
Rumbalara Aboriginal Co-operative (RAC) has been operating for 36 years and generates a wealth of data that is usually handed to government departments for reporting reasons, reports, research and various other administrative purposes. This year, we decided that unless RAC collects, analyses, and reports on our own data we will forever be at the mercy of the other peoples’ interpretation of our information. Our first discussion paper, Changing the Paradigm to ‘Close the Gap’, utilizes our own health service data to present a health profile of the typical RAC health service user, and offers a new understanding of the context of Aboriginal and Torres Strait Islander health and well-being to effect measurable change.

Greater Shepparton has the largest stable population of Indigenous people in Victoria whose profile is also measurably different to the mainstream and national indigenous profiles. Our discussion paper focuses on seven key health determinants of the gap in life expectancy between Aboriginal and Torres Strait Islander people and other Australians. Those determinants are: Cardiovascular, Diabetes, Kidney disease, Smoking, Overweight and Obesity, Asthma, Mental Health and Mental Illness.
We compared and contrasted the data for the seven key health determinants across the following:

- The general population of Australia.
- The Aboriginal and Torres Strait Islander population of Australia.
- The Aboriginal and Torres Strait Islander patients of RAC Health Service

From this data we were able to present a profile of the typical health service user at RAC. That is, they are likely to

- Have better heart health than that of the general population of Aboriginal and Torres Strait Islanders.
- Have heart health more closely aligned to that of the general Australian population.
- Have lower rates of high blood pressure than the general population of Australia and the Australian Torres Strait Islander population.
- Have diabetes at a significantly higher rate than the general population of Australia and the Australian Aboriginal and Torres Strait Islander population.
- Have kidney disease at alarmingly higher rates than the general population of Australia and the Australian Torres Strait Islander population.
- Have lower daily smoking rates than the general Australian and Torres Strait Islander population.
- Be more obese and overweight than, both the general population of Australia and the Australian Torres Strait Islander population.
- Have asthma at a higher rate than the general population of Australia.
- Suffer from mental illness and mental health problems at a higher rate than the rest of Australia.

The profile presents a picture of a population that is unwell. However, RAC believes that the community we serve presents with a skewed understanding of what wellness and wellbeing is. In short, being unwell has been normalized. This has occurred through years of living in sub optimal conditions that encompasses physical, mental, cultural, spiritual, educational, and economic wellbeing, and a history of trauma and disadvantage that has been experienced through multiple generations.

The implications of this normalized state of being unwell are clear. Our indigenous community is engaging with the health system at a later stage and disengaging at an earlier stage than they otherwise would because being unwell is the norm. Our community will never be ‘well’ if we continue to pursue the ways we are doing things now. The latest, Closing the Gap reports show that we are failing and our targets are not being met.

The state of ‘being unwell is the norm’ needs to be recognized and taken into consideration when designing, planning, and implementing culturally effective services across the health system. Episodic health interventions based on a self-assessment of wellness or sickness will not close the gap. Nor will an environment where primacy is placed upon applying for, administering, complying with and reporting to various government funding departments. This takes our focus and resources away from our real goals. We have become activity based rather than outcome based. Simply, the focus upon fulfilling the requirements of the activity-based funding model disadvantages, rather than assists Aboriginal Community Controlled Health Organisation’s (ACCHO’s) to address the health needs of the people in their communities who engage much later, possibly to a distorted view of what constitutes wellness.

An ongoing engagement across the life continuum navigating multiple events and issues will help to ‘Close the Gap’. ACCHO’s are best placed to help achieve this. We work in a complex multi layered environment. However, the services we offer to our community incorporate a respectful and safe relationship and narrative based engagement that isn’t time limited and understands the history that each individual brings with them.

The workforce we need must be capable of maintaining the relationships and engagement over time while supporting individuals and families to better navigate the multiple complex systems across the social, service and political constructs. In an age of increasing specialization, we believe that it is the quality and effectiveness of our service integration, coordination and partnerships that will close the Gap.

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Abstract 1
Title: Measles Vaccine Refusal Causes and Preventative Strategies

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Background
Measles is a highly contagious disease with significant morbidity and mortality in some populations. The disease can be prevented by vaccination, however, the uptake of this vaccine has been diminished due to concerns about its safety and low risk perceptions of measles. Consequently there has been outbreaks of measles in populations where the vaccine have been provided free through public health programs. In this review, the reported reasons for vaccine refusal are outlined and the public health strategies to increase uptake of measles vaccination, with reference to Australia, are proposed.

Methods
Data for this review was obtained by searching MEDLINE, PubMed, Scopus and Embase databases, using the search terms: Measles vaccin* AND Refusal OR Hesitancy. The search yielded 1,361 potential studies, with 18 studies included in the final review. Included studies were critically appraised using a mixed method evaluation tool. Epidemiological data was obtained using The Centre for Disease Control and Prevention Database and additional web-based material was obtained from search engines Google and Google Scholar.

Results
The findings showed that vaccine decision making is determined by socio demographic determinants, individual beliefs and external influences. Safety concerns, perceived vaccine effectiveness, low risk perception of measles and a preference for natural immunity were the most commonly cited reasons for parental refusal. Vaccine information sources were also shown to influence vaccines choices, as were parent’s level of trust in the Government, pharmaceutical companies and in health care providers.

Conclusions
The growing body of literature on the determinants of vaccine hesitancy and refusal can help inform health care providers and public health officials’ in efforts to improve vaccine uptake. Federal and State Governments have developed a stringent approach to increase vaccine uptake in Australia, introducing “no jab, no play” reforms. Future efforts should also focus on: enhancing community education on in regard to vaccine safety, improved resource tools for health care professionals and the development of a promotional strategy to enhance public confidence in vaccination.

Abstract 2
Title: “It’s no big deal, just call”: Why don’t younger people from refugee backgrounds call a rural early psychosis service?

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Background
This study was instigated by local data showing that few people from refugee background in the Goulburn Valley were accessing local mental health services. Evidence is clear that trauma experienced during a family’s flight from a country of origin has a profound effect on the mental health of children. Even if born in the country of refuge children will suffer mental health difficulty because of their refugee status. In Australia and elsewhere young people from these backgrounds are not utilising mental health services and research on the reasons why this is so remains scarce. Meta-analyses indicate a consistent relationship between duration of untreated psychosis (DUP) and poor mental health prognosis independent of other factors. Possible delay in presentation to mental health services is of major concern for young minds.

Methods
This paper presents the findings of 4 focus groups held with 32 young people aged 16 - 21 years from refugee backgrounds living in the Shepparton area. A vignette was utilised to begin a semi-formal conversation around perceived barriers to seeking help.

Results
Participants first gave pragmatic responses to the scenario. Themes later emerged describing cultural, social and personal barriers to help-seeking amongst these young people.
Conclusions: The findings suggest most young people would first approach close friendship networks for help with psychosocial problems. Other avenues of assistance would depend on personal experience and context, culture and social situation. The implications of reducing DUP in refugee communities and possible methods to disseminate service information are addressed.

Abstract 3

Title: Diabetes and chronic kidney disease: Implications for regional health care delivery

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Background
Diabetes is associated with an array of complications including to chronic kidney disease and renal failure. The clinical management of patients with diabetes and chronic kidney disease have workforce implications and the potential for regional diabetes-renal clinics are the foci of this paper.

Methods
The retrospective study examined cross sectional demographic and laboratory data from electronic patient records from a regional diabetes centre. Data included age, sex, residential postcode and eGFR, microalbuminuria and HbA1c. Blood pressure, anti-hypertensive medications, and lipid-lowering medication data were also collected and analysed using SPSS version 22.0.

Results
Among patients with diabetes, 17.8% had chronic kidney dysfunction (eGFR <60) at their last presentation to the diabetes centre, and 15.0% were not attending the hospital’s renal clinic. The decline in eGFR was greater among patients not attending the renal clinic (19.80mL/min/1.73m², p<.001) than those who attended the renal clinic (16.62mL/min/1.73m², p<.001).

Conclusions
A high percentage of people attending a regional diabetes centre had chronic kidney disease, many of whom were not attending a renal clinic or being seen by a nephrologist. The study highlights there are health care delivery implications in regional areas with regard to the adequate resourcing for diabetes centres, multidisciplinary integrated care approaches, and the potential benefits of joint diabetes-renal clinics that may also support General Practitioners.

Abstract 4

Title: Implementation of best practice is a long and winding road: An audit of hospital patients with diabetes

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Objective:
To examine the current practices, processes and patient outcomes among those who provide and seek care within a publically funded regional hospital.

Methods:
A retrospective study that took a snapshot of 198 patients living with diabetes equalling 216 episode of care that were discharged between 1st May 2014 and 31st May 2014. Data included age, sex, birthplace, suburb, indigenous background, language spoken at home, hospital ward, primary hospital doctor and HbA1c levels. Data were collected through a documentation review of medical notes and electronic patient records.

Results:
Among the 198 patients, 52% of patients were living in close proximity to the regional hospital GV Health (GVH), while 48% were living more rurally in Northeast Victoria and southern New South Wales, but were no more than an hour’s drive from GVH. Among the patients, 42% were female, 21% were born overseas and 7% were Aboriginal or Torres Strait Islander, 93% used English as their first language, and 55% were married or in a de facto relationships.

Among the 216 episodes of care provided by 40 primary physicians, 5% episodes were patients with Type I Diabetes, while 95% episodes were patients with Type 2 Diabetes. In addition, diabetes had an impact on the treatment given, or length of stay among 40% patients. While admitted, blood glucose levels were not monitored in 20% of all episode of care and only 57% episodes of care that were monitored reached therapeutic range. Those inpatients seen by the diabetes team were four times less likely to experience a hypo or hyperglycaemic event while in hospital than those not seen by the diabetes team, \( \chi^2 (3, N=211) = 39.21 \ P=.001 \), (OR=4.05, 95% CI 1.99–8.25).

Conclusion:
Inpatient care in most cases is adequate; however, improvements may be made include greater recording of blood glucose monitoring and increased intervention among staff when a hypo or hyperglycaemic event occurs.
The study emphasises the need for care that supports inpatient outcomes that is centred on adopting national guidelines and best practice, building a board base of expertise within hospitals and diabetes that is monitored comprehensively.

Abstract 5

Title: Risk of Falls in Obese patients following Total Hip and Knee Arthroplasty: A Retrospective Observational Cohort Study.

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Background

The link between obesity and total joint arthroplasty is extensively researched. However, there are no known studies that investigate whether obesity is associated with an increased rate of falls following total knee (TKA) or hip arthroplasty (THA). The purpose of this study is to determine if such an association exists.

Methods

A total of 555 patients that underwent total hip and knee arthroplasty procedures in 2012, 2013 and 2014 were contacted for post-operative assessment of all-cause falls [self-reported questionnaire]. Of these patients, 485 met our inclusion criteria and agreed to participate in the study. Utilizing our institutional electronic records system, we collected height and weight data from pre-operative clinic notes, and used this to group patients into obese and non-obese groups. Summary statistics were presented and logistic regression was performed for further analysis.

Results

Of the 485 patients enrolled, 289 (59.6%) had TKAs, and 196 (40.4%) had THAs. 58.8% of patients had a BMI >30. Of the patients, 35.3% (n=171) had falls. The patients those were fallen, 38.6% (n=66) and 61.4% (n=105) of them had THAs and TKAs, respectively. In the logistic regression analysis adjusted for ‘age’, it is found that the likelihood of fall is 88% higher in people with obesity (OR: 1.88, 95% CI 1.27-2.8, p=0.002). In the similar adjusted logistic regression analysis it was determined that obese patients who had TKAs had a much higher likelihood of falls (OR: 2.11, 95% CI 1.21-3.69, p=0.008) compared to that of obese patients undergoing THAs (OR: 1.58, 95% CI 0.87-2.9, p=0.13).

Conclusions

Obese people are more likely to fall irrespective of the type of arthoplasty. Further studies are required to understand the mechanics of post-operative falls for finding out appropriate interventions to reduce them in such patients.

Abstract 6

Title: Homeless Youth Dual Diagnosis Initiative (HYDDI): 3 months and the potential

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Background

In 2009, Kevin Rudd committed to halving the number of homeless people by 2020, since then approx. $5 billion has been spent to improve this issue under the National Partnership Agreement on Homelessness [NAPH]. The Goulburn Valley Homeless Youth Dual Diagnosis Initiative (HYDDI) Project was funded from this Partnership Agreement. The Goulburn Valley HYDDI is a partnership program developed between Child & Youth Mental Health Service [CYMHS] and the homelessness sector. A strong sustainable society depends on the well being of its children and young people. Intervention with children and young people with emotional and behavioural difficulties has been proven to be most effective when it is done early.

The HYDDI

The HYDDI clinician’s model of care that will primarily support the homelessness sector on all three tiers (primary, secondary and tertiary) to best support the youth who are difficult to engage, who may be experiencing mental health [MH] and AOD issues that may slip through the gaps due to their transient lifestyle. The project has been running for approximately 3 months. Since commencement of the role, there has been the development of warm referral pathways between Youth Residential Units, AOD services, Community Youth Programs, Headspace and the Department directly to CYMHS. The role is based within the community and local youth refuge. This set up provides clinical service and support to disengaged youth and youth workers who may regularly find it difficult to access MH services. Feedback thus far has been positive in relations to accessing psycho-education and secondary consults regarding MH and AOD needs for youth, as well as linking the youth into appropriate support services in a timely manner. Access by community groups in relations to mental health and AOD education has been highly sort after from a number of different programs, such as; the homeless and youth sectors, ethnic community groups, local schools and police.
Abstract 7

Title: Visibility in health statistics: using population data linkage to accurately identify Aboriginal and Torres Strait Islander Births in Hume Region, 1988-2008: population database study

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Background
Aboriginal and Torres Strait Islander people (hereafter with respect ‘Aboriginal’) continue to be only partially visible in Australian health statistics because of inconsistencies in the data describing them. Incomplete identification of Aboriginal people in population data, particularly in Victoria, compounds the difficulty of accurately quantifying the status of infant and child health. In order to enable a more comprehensive profile of Aboriginal maternal and perinatal outcomes and mortality, a more accurate ascertainment of Aboriginal births is required.

Methods
The birth information contained in two population statutory datasets The Victorian Perinatal Data Collection (VPDC) and Victorian Registry of Births, Deaths and Marriages (RBDM) were matched. Births to Aboriginal women and women partnered to Aboriginal men were ascertained in the matched data, and the number of births compared between the matched dataset and the VPDC for each Health Region in Victoria.

Findings
In the Hume Region, (years 1999–2008 inclusive), a further 345 live births in addition to those recorded in the VPDC were identified as Aboriginal as a result of the population data matching process, representing a 51% increase in the ascertainment of Aboriginal births reported in Hume over the ten year period. The proportion of Aboriginal births increased over this period to 4.6% of all births. Maternal and infant birth outcomes will be reported in this paper

Interpretation
Matching the birth information collected through statutory processes established a more complete ascertainment of Aboriginal births in this region. These data provided a more accurate denominator to construct birth and mortality profiles for Victorian born Aboriginal infants and children. This research informs the baseline of empirical evidence for the development of evidence-based strategic action plans, and the evaluation of policies and initiatives aimed at reducing the disparities in vital statistics for Aboriginal and non-Aboriginal infant and child populations.

Abstract 8

Title: Coeliac Disease Testing: Perspective from a Regional Australian Hospital

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Background
Prevalence of coeliac disease may be high in rural Australia, as many cases remain asymptomatic and undiagnosed in the community. Coeliac disease diagnosis requires adequate and appropriate testing. Insufficient testing may increase complications. In this study we determined the prevalence of appropriate testing for coeliac disease among eligible patients admitted in a regional Australian hospital.

Methods
Retrospective reviews of all admissions were carried out from medical, surgical and geriatric departments in a rural Victorian hospital, Australia. Two reviews were conducted. The initial review collected information for patients that were admitted from August 2012 to January 2013 who were diagnosed with haematin-deficiency anaemia due to unspecified causes, protein-energy malnutrition and irritable Bowel Syndrome. Later in an extended review of data between February 2012 and February 2013, the study collected all serology test requests for coeliac disease to identify the cases with positive serology and whether they were followed up by seeking histological confirmation.
Results
This study found that, except for Iron Deficiency Anemia (IDA) and Irritable Bowel Syndrome (IBS), a very small proportion of patients with unspecified anaemia and Protein Energy Malnutrition (PEM) were investigated (15.6% and 11%, respectively) for celiac disease. Invasive testing such as histopathology was requested only about 52% of serology positive cases.

Conclusions
Inadequate testing and awareness for coeliac disease warrants several health systems issues such as trainings of health care providers and health promotional campaigns in the community. Besides, specialist gastroenterologist services and telemedicine support would benefit regional Australia in the diagnosis and management of coeliac disease.

Abstract 9
Title: Telehealth: Is it for everyone? – a case study.
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Background
TESTme is a free service of Melbourne Sexual Health Centre (MSHC) that offers telephone consultations with a nurse for sexually transmitted infection (STI) testing and contraceptive advice for country Victorians. The service was established to increase the sexual health testing and treatment options for rural Victorians. It is phone and internet based. MSHC has been operating for more than 90 years as a specialised unit for the diagnosis and treatment of STIs and has established a national and international reputation for clinical excellence and innovation, constantly striving for the highest standards of sexual health care, research and education.

In this case study a young, rural woman with technical and social phobias, including a fear of telephones, contacted the service seeking assistance. Using a shared model of care, it was possible to support her to an optimal sexual health care outcome.

Methods
A Hub and Spoke Model of shared care was utilised to create access to rural sexual health service provision for this isolated young woman. Communication between MSHC, the Rural Sexual Health Nurse Practitioner candidate at Goulburn Valley Health and the client was via the agency of email, with time and patience required to engage with her and create a plan for service provision and care.

Results
Effective communication strategies, patience and listening to the client’s needs in a supportive manner lead to a face-to-face consultation and appropriate history directed STI testing and follow-up.

Conclusion
Telehealth may be a suitable modality to provide health care to many rural and isolated persons. This case study demonstrates that an effective model of shared care can provide best practice outcomes for the more isolated and vulnerable rural person. It also demonstrates the value of clinical networks and the benefit of having sexual health expertise available in rural locations.

Abstract 10
Title: Taking Care of Me
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Background
The policy for all Victorian government schools requires sexuality education to be included in the curriculum and taught from Prep to Year 10. Despite this, a study involving almost 3,000 Australian students in Years 10 and 12 found that STI knowledge is relatively poor. The study also demonstrated that 70 per cent of Year 10 students reported having already experienced some form of sexual activity.

Methods
In 2010 a local, Shepparton, inter-agency partnership developed a sexual health promotion strategy ‘Taking Care of Me’ which is designed to raise sexual health awareness and knowledge in local secondary school students. It was funded by the Sexual Health and Diversity Enterprise (SHADE) community grants program through Family Planning Victoria.

The target group is Year 9 students as it complements the curriculum at this level with the opportunity for such information to be reinforced in the classroom. Topics covered included:
- STIs and Blood borne viruses (BBVs)
- Pornography
- Contraception
- Condom use
Healthy Communities

This program has now been delivered for 6 years and evaluation via student feedback has been positive.

All state secondary schools in the Shepparton and Mooroopna area participate, which includes Aboriginal and Torres Strait Islander (ATSI) students and those from culturally and linguistically diverse backgrounds (CALD). Delivery of the program has expanded into neighbouring towns.

Results
It was found that 95.3% of respondents believed ‘Taking Care of Me’ had provided them with a greater understanding of topics associated with sexual health.

The initial post-program survey revealed 89.5% of respondents felt the program should continue.

Conclusion
The ‘Taking Care of Me’ program is successful in engaging the target group and provides an effective model for the acquisition of sexual health knowledge.

Abstract 11
Title: The Evolution of a Regional Nurse-Led Response for Adult Victims of Sexual Assault.
Authors: Wallis S1,2,3, Biesiekierski C1,2, Guilmartin B1,2,

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Background
The Victorian Law Reform Commission (VLRC), in their review of sexual offences (2004), noted that there was an acute shortage of medical practitioners who were willing to take part in the crisis response team after a sexual assault. This shortage was identified as being particularly acute in regional Victoria.

In 2006 the Victorian Institute of Forensic Medicine initiated the development of a Forensic Nurse Network (FNN). In 2011 a partnership between The University of Melbourne and Goulburn Valley Health led to the creation of a Rural Sexual Health Nurse Practitioner position.

Service Development
In 2008 two nurses from the Goulburn Valley trained and joined the FNN. A regional model of forensic nursing service provision for adult victims of sexual assault was then developed. 2011 saw the creation of a Nurse Practitioner led sexual health service which enabled different options for follow-up care and created a local, holistic, female nurse-led service for these clients.

Outcomes
This presentation will report on the development of a regional Crisis Care Unit and the subsequent evolution of a specialist NP led sexual health service available to these women.

Client numbers, demographics and characteristics will be presented.

There is evidence of victim / survivors attending the sexual health service for review.

Recommendations
To continue to offer a confidential and local NP led sexual health service.

To promote and foster the development of NP sexual health positions in regional areas.

To engage more nurses in the FNN to provide similar care within their communities.

Abstract 12
Title: Engaging with Hidden and Marginalised Groups in the Rural Setting – Sex Workers, Where Do We Begin?
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Background
Best practice in sexual health develops through the integration of clinical expertise, research evidence and collaborative partnerships. The management, treatment and prevention of sexually transmissible infections is founded on public health theory and considers the social determinants of health.

In Victoria there is a two tiered sex industry: where it operates legally it is regulated and the relevant legislation is the: Sex Work Act 1994, Sex Work Regulations 2006, Sex Work (Fees) Regulations 2004 and the Public Health and Wellbeing Act 2008.

It is proscribed that sex workers working in the legal industry in Victoria must show evidence of regular testing for sexually transmissible infections (STIs) and blood borne viruses (BBVs), with the interval currently being set as 3 monthly testing. Sex work is still held by many community members as a stigmatised and hidden profession.
A recent article discusses what primary health care services should be made available to Australians living in rural and remote communities, with sexual and reproductive health being identified as a core service. So how do we engage with, and deliver services to, these members of our rural community?

Content
This proposition will explore considerations on how to deliver sexual and reproductive health care to these hidden clients in the rural and regional setting using the experiences and insights gained in Shepparton as discussion points.

How did the relationships develop? What have been the most effective aspects of the relationship and what have been the challenges? What are the ethical considerations? How do you know that you are making a sustainable difference?

Abstract 13
Title: Nurse Practitioner in Sexual Health: Is there value in providing clinical services at headspace?
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Background
Headspace is the Australian National Youth Mental Health Foundation providing early intervention mental health services to 12-25 year olds.

The service is designed to make it as easy as possible for a young person and their family to get the help they need for problems affecting their wellbeing. This covers four core areas: mental health, physical health, work and study support and alcohol and other drug services.

A partnership between The University of Melbourne and Goulburn Valley Health led to the creation of a Rural Sexual Health Nurse Practitioner position. One day a week this NP delivers clinical services at headspace in Shepparton.

Best practice in sexual health develops through the integration of clinical expertise, research evidence and collaborative partnerships. The management, treatment and prevention of sexually transmissible infections and unwanted pregnancies are founded on public health theory and consider the social determinants of health.

Methods
We reviewed the clinical utilisation of the NP service, as well as the presenting conditions managed within this population of young people. A clinical audit of client files from 2013 – 2015 has been undertaken. We also have conducted an independent, phone client satisfaction survey about the service.

Results
Presentations have been variable, ranging from symptomatic patients, contraception, unplanned pregnancy and blood borne virus risks. More young women than young men present. Independent feedback from phone follow up has been favourable and supportive of the service.

Conclusions
Results support a Nurse Practitioner (SH) model of care in the provision of sexual health services in this young persons’ mental healthcare setting.

The presence of sexually transmissible infections and pelvic inflammatory disease within this population would have gone undiagnosed and untreated.

Care is being provided to some of our more vulnerable young persons who do not access mainstream healthcare. Clients report satisfaction with the service and care.

Abstract 14
Title: Biomedical waste disposal in India: Potential considerations for global antimicrobial resistance development and pandemics of infectious diseases.
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Background
Garbage and medical waste disposal is a huge problem in many developing countries including India. Mixing general and medical waste together for disposal may accentuate the situation, especially due to the significant threat of sharp injuries and the resultant possibilities for the spread of infections. Some of these infectious diseases will contribute to the development of antimicrobial resistance due to inaccurate diagnoses and over the counter non prescription antibiotic treatment in such nations.

Context
India’s waste production is enormous and the traditional management of these wastes is not possible in urban India. Therefore, rural style waste management occurring in urban India is posing serious health and environmental concerns. The range of medical waste
generation in India is between 0.5 and 2.0 kg bed-1 day-1. Annual Indian estimation of total medical waste is about 0.33 million tonnes. Among the hospital waste, food, bandage, linen and other infectious waste constitutes 70-80%, while plastics, disposable syringes and glass constitutes 7-10%, 0.3-0.5%, 3-5%, respectively. This waste is generally collected in a mixed form, transported and disposed of along with municipal solid wastes. The other big concern is the disposal of insulin dispensing needles of approximately 300 million Indians diagnosed with diabetes. About 84.1% these diabetics dispose of their insulin syringe and needles into the household waste bins. The improper disposal of needles and syringes for 1.1 million injecting drug users (IDUs) is adding to the overall global burden of infectious diseases and over the counter inaccurate antibiotic usage.

Conclusions
National and international agencies and their commitment to this issue for preventative global strategies are crucial. Australia is a country that can influence and shape such preventative global waste management health care strategies in Advocating for and promoting good global waste management may help to focus and tackle these serious public health issues and help avoid further antibiotic resistant pandemics in our neighbours and within this country.

Abstract 15
Title: Demographics and Incidence of aspiration pneumonia in stroke patients admitted to the Goulburn Valley Health Base Hospital in Shepparton.

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Background
Stroke patients are more likely to suffer from aspiration pneumonia. Previous studies demonstrated a relationship between the duration of time taken the stroke patient to be seen by a speech pathologist and the incidence of aspiration pneumonia. In this study, we primarily determined any relationship between incidence of aspiration pneumonia and time taken to be seen by a speech pathologist. We also compared the demographic and clinical characteristics, and incidence of aspiration pneumonia in stroke patients to that of national data.

Methods
A retrospective review of data was used to analyse the demographics and incidence of aspiration pneumonia in stroke patients admitted to the Goulburn Valley Health Base Hospital in Shepparton during the data reviewing period between July and October 2015. After receiving institutional approval, several demographic and clinical data were being collected and analysed.

Findings
A total of 57 patients were identified and 48 patients were eligible for this study. Of the 48 patients, 25(52%) had some form of dysphagia and 10(20.8%) patients developed aspiration pneumonia. The average time taken by speech pathologist to see a patient was 45.7±46 hours. Only 24(50%) patients are being seen by speech pathologist within 24 hours since admission. This figure has risen to 34(70.83%) when it reached the 48 hour mark.

Discussion and Conclusions
In this study 52% had some form of Dysphagia which is 5% higher than the national data. Also, the occurrence of aspiration pneumonia in our study is 9 – 11% higher than that of national data. Compared to national average (21 hours), more than double time taken (45.7 hours) by a speech pathologist to see a patient in this study. Within 24 hours of admission, only 50% of patients were being seen by the speech pathologist which is 6% lower to that of national data (56%), while it is 5.83% higher to that of national data if compared the visit by a speech pathologist at 48 hours. These paradoxes to the national data might be due to smaller sample size, shorter duration of review and region specific focus. Therefore, further longitudinal studies will be invaluable for ascertain the findings.

Abstract 16
Title: Utilising research for organisational change

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Background
This study aimed to facilitate organisational change through research to implement a workplace smoking ban. Approximately 25% of the workforce in this small rural health service in rural Victoria smoked. Non-smoking staff expressed concern about smoking on the health service campus and the effects of passive smoking.

Methods
This small exploratory action research study, utilized the employee survey developed by QUIT Victoria. The survey was attached to staff payslips to be voluntarily completed and returned anonymously.

Results
A smoke free workplace policy was introduced as a result of the research project. The majority of the
workforce (66%) supported a workplace smoking ban, citing adverse effects of smoking on them and the environment. Staff also supported quit smoking initiatives for staff and a small percentage of those who smoke (27%) reported it would encourage them to quit. Four staff reported that a workplace smoking ban would create difficulties for them, highlighting the importance of support for these staff.

Conclusions
Utilizing a research approach facilitated positive change for local level workforce and workplace issues.

Abstract 17
Title: The value of Rural and Isolated Practice Endorsed Registered Nurses (RIPERNs) in a small rural health service.

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Background
Rural Isolated Practice Endorsed Nurses (RIPERN’s), also known as Advanced Practice Nurses (APN’S) are increasingly prominent in nurse-led out of hours care in small rural health services in Australia. There has been very little research in relation to the RIPERN role.

Methods
General practitioners (GP’s) with admitting privileges and practising RIPERN’s at a small rural health service undertook qualitative interviews to explore the value of the RIPERN role. The interviews were transcribed verbatim and analysed to identify themes.

Results
GP’s perceived the benefits of introducing RIPERN’s to small rural health services outweighed any challenges. Perceived benefits predominately relate to improved work/life balance for GP’s. RIPERN’s reported time constraints of the new role in addition to usual duties and difficulties associated with professional and public awareness of the scope of the RIPERN role.

Conclusions
It is clear that a range of factors are perceived by the study respondents as being able to potentially hinder or facilitate the implementation of the RIPERN role in a small rural health care setting. Whilst the views of the respondent are largely positive, there are important issues that need to be addressed.

Abstract 18
Title: Effects of Surgical Management on Multidirectional Instability of the Shoulder: a Meta-Analysis

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Background
The controversy remains regarding which surgical options are a preferred treatment in shoulder multidirectional instability (MDI). The purpose of this study was to assess the effectiveness of arthroscopic and open surgical techniques in shoulder MDI.

Materials and methods
The analyses were performed in accordance with the Cochrane Handbook for Systematic Reviews and the PRISMA statement. The databases used include Medline, EMBase, ClinicalTrials.gov, The Cochrane Library and its Register of Controlled Trials.

The selected studies were pooled into three groups: open capsular shift (OCS), arthroscopic capsular plication (ACP), and arthroscopic thermal capsular shrinkage (TCS). Two years Follow-up data were used. Outcome measures include recurrent instability, range of motion, and other complications. Subgroup analysis consists of the rotator interval closure technique and rehabilitation methods. Forest plots of proportional meta-analysis and mean meta-analysis were used to compare the difference. Risk of bias, funnel plots, heterogeneity, subgroup analysis were also used to screening the studies and assessing the reliability of the data.

Results
After screening, 36 studies were selected, including a total of 1,117 shoulder cases in 1,053 patients.

The OCS and ACP groups exhibited recurrent instability rates of 9.9% (95%CI, 7.3%-12.9%) and 6.08% (95%CI, 3.7%-8.9%), respectively, without significant difference. Both were significantly higher than the rate of 23.9% (95%CI, 16.6%-32.2%) in the TCS group.

OCS and ACP groups revealed lower reoperation rates of 5.2% (95%CI, 2.7%-8.5%) and 4.8% (95%CI, 2.3%-8.0%), respectively, than that of 16.9% (95%CI, 12.4%-21.8%) in TCS group.
OCS caused a higher loss of range of motion rate of 33.8% (95%CI, 27.7-40.1%) than the 5.5% (95%CI, 3.6-9.8%) in the ACP group. The mean losses of external rotation in OCS group was 7.0 (95%CI, 3.3-10.6) degrees, significantly higher than other groups.

In subgroup analysis, no difference was observed between with and without performing the rotator interval closure technique. The analysis concerning rehabilitation methods also showed no difference.

Conclusions
The classic OCS technique and the newer ACP technique demonstrated comparable results in general MDI populations. However, the latter had the advantage of avoiding postoperative stiffness. Thermal capsular shrinkage may need to be avoided in MDI treatment because of its higher failure rates.

Abstract 19
Title: Surgical interventions for type II superior labrum anterior posterior (SLAP) lesions

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Background
The superior labrum anterior posterior (SLAP) lesion could result in athletes losing competitiveness and manual workers unable to perform overhead lifting. The controversy of surgical options still exists when non-operative treatment fails.

This study is to assess the effects of different surgical techniques for treating type II SLAP lesions.

Methods
The study is an ongoing project with Cochrane Bone, Joint and Muscle Trauma Group, and follows the guidelines in Cochrane Handbook for Systematic Reviews and Interventions.

Searched studies will include randomised controlled trials (RCTs) and quasi-randomised controlled trials. Patient’s population include over the age of 14 years, with an arthroscopically confirmed diagnosis.

The main comparison is between biceps tenotomy/tenodesis versus SLAP lesion repair, and will also include arthroscopic surgery placebo control group where available. Primary outcomes include functional scores, such as ASES and DASH scores, return to previous injury activities, serious adverse events or complications. Secondary outcomes include the Short Form-36, persistent pain measured by a visual analogue scale, shoulder stiffness assessed by range of motion, time to return to previous activities. Time points include short, intermediate and long-term follow-up, at about six, six months, and 2 years respectively.

The databases are the Cochrane Bone, Joint and Muscle Trauma Group Register, the Cochrane Central Register of Controlled Trials, MEDLINE, EMBASE and SPORTDiscus. No language restrictions will be applied. The analysis includes pooled results using both fixed-effect and random-effects models in forest plots and examining publication bias using a funnel plot.

The subgroup analyses will be conducted, including age, previous activity. Sensitivity analysis on various aspects of trial and review methodology, and the GRADE approach to assess the quality of evidence will also be performed.

Conclusion
The conclusion will be based on analysis of the current available data as comprehensive as possible to assess the effectiveness of different methods in treating SLAP in an unbiased approach.

Abstract 20
Title: The lumps and bumps of establishing a rural multidisciplinary paediatric feeding clinic

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Background
Paediatric feeding is an area of clinical specialty for Speech Pathologists and Dietitians. Over the past three years, an increase in hospital referrals has identified the need for a complex multidisciplinary feeding clinic. Specialised assessment and management of infants and children with complex feeding needs in the 0-5 year age group, has emerged as an area where Speech Pathologists with expertise in paediatric feeding, can effectively contribute to improving patient outcomes and reducing hospital re-admissions. Historically, paediatric clients with complex feeding issues were provided with inpatient intervention by the Speech Pathology and Dietetics clinicians. Timely access to community based paediatric services for ongoing treatment was problematic due to long waiting lists. Delay in continuation of treatment places these children at nutritional and developmental risk. As a result children in this cohort are more likely to develop sensory
and oral aversions to eating as well as defensiveness surrounding meal times.

Aim
To develop a Speech Pathology led multidisciplinary allied health feeding clinic to provide a clinical pathway for treatment of medically based feeding conditions whilst children wait for update into a community service.

Methods
An area of emerging risk through increased identification and referral of complex paediatric feeding problems, prompted discussion between the paediatric and allied health teams to consider an appropriate management pathway. Several budget proposals were unsuccessful in securing funding for the clinic. External funding from Department of Health and Human Services was received in 2015 to conduct a pilot project under the Advanced Practitioner Model.

Results
Development and initial findings of the pilot project will be presented.

Discussion
Regional Victorian children have limited access to a non admitted specialised complex feeding service. Continued advocacy for this client group and service will be a high priority.

Abstract 21
Online Memory Groups for Older People in Regional and Remote Communities: A survey of preferences and resources

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Background
The aim of the project is to evaluate the feasibility of a memory management program adapted for older adults living in regional and remote communities in Victoria. The LaTCH Memory Group Program was developed by a team of Australian researchers from La Trobe University and Caulfield Hospital to help older people improve memory by providing strategies for dealing with memory problems in everyday life. The LaTCH program was designed to assist maintenance of cognitive health and independence in daily activities.

Methods
To gauge interest, a 5-minute survey about preferences and barriers to participating in a memory group program was distributed to five regional areas in Victoria; Mount Macedon, Prom coast region, Shepparton, Healesville and Warragul. The questions incorporated people’s capacity to participate online. Approximately 45 organisations were contacted to distribute the survey. Around 25 community organisations agreed to publicise the survey electronically through their website or distribute paper copies.

Results
One hundred and sixty-two surveys were returned. The average age of respondents was 75 years (60 to 95), 57% were female. In regard to mode of delivery, 56.6% of respondents preferred online, or partially online, while 43.3% would prefer face to face participation. Regarding technology use, 75% of respondents use the internet and 77% use a computer at least weekly (55% daily). Barriers to participating online were mainly due to accessing computers and internet, and confidence with technology. Regarding the capacity to attend a face to face program, 80% of respondents thought it would be easy for them to attend. Barriers to participating in person were mainly due to time constraints and carer responsibilities.

Conclusions
There was a positive response to the possibility of participating in a memory program. Difficulties exist for both forms of program delivery; however it appears that with some assistance, it would be feasible and acceptable to deliver a group memory intervention such as LaTCH by internet. On the basis of the survey findings, we are currently conducting a pilot study of the LaTCH Memory Program by blended learning in a regional centre.

Abstract 22
Improving the health of Aboriginal mothers and babies through caseload midwifery

Authors: Helen L McLachlan 1, Della A Forster 12, Sue Kildea 3, Jane Freemantle 4, Jennifer Browne 5, Jeremy Oats 6, Michelle Newton 7, Kellie Tranter 1, Marika Jackomos 7, Jacqueline Watkins 4, Simone Andy 5, Sue Jacobs 3, Ngaree Blow 4, Karyn Ferguson 4, Catherine Chamberlain 5, Susan Donath 9, Helena Maher 5, Jenny Ryan 1, Belinda O’Connor 1, Fiona McLardie-Hore 1

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Abstract 23

Title: Analysis of response to EGFR inhibitors in KRAS wild-type/BRAF mutated patients with metastatic colorectal cancer in routine clinical practice

Authors: Babak Tamjid 1,2, Zee Wan Wong 1,2, Zhen Rong Siow 1, Belinda Lim 3,4,5, Michael Harold 2,3, Peter Gibbs 3,4,5

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Background
BRAF mutation has been reported in up to 10% of metastatic colorectal cancer (mCRC). BRAF mutated (MT) mCRC patients are generally resistant to standard therapies and have poor survival outcomes. Use of Epidermal Growth Factor Inhibitors (EGFRI) like cetuximab and panitumumab in KRAS wild-type (WT) mCRC patients is associated with prolonged survival and they are approved in Australia for use in this patient population. However, use of EGFRI in KRAS WT/BRAF MT mCRC patients is controversial. To date there are no prospective studies investigating the efficacy of EGFRI in KRAS WT/BRAF MT mCRC and the aim of this study is to assess outcomes of EGFRI in this patient population.

Methods
All the patients with mCRC in a multi-site Australian registry, TRACC (Treatment of Recurrent and Advanced Colorectal Cancer)7 from January 2006 to December 2015 will be examined for the frequency of KRAS and BRAF gene mutations. Patients with known KRAS and BRAF status will be analysed for this study. Characteristics of BRAF MT patients and any impact of BRAF status on treatment approach and outcomes will be examined. Response and outcomes to EGFRI in KRAS WT/BRAF MT mCRC patients will be examined in more details and it will be compared to KRAS WT/BRAF WT patients. Survival estimates will be calculated using Kaplan-Meier method with the log-rank test for survival comparisons. Variables will be compared using the Chi square method or t-test. Two-tailed p values of <0.05 will be considered significant. The study will be conducted in accordance with Ethical Guidelines for Biomedical Research Involving Human Subjects and it has been approved by Human Research Ethics Committees of all the participating hospitals in the TRACC database.
Results
Data collection and analysis are currently in progress and it will be completed by the end of September 2016 and the results will be ready for presentation and publication by the end of December 2016.

Conclusion
We believe our study can help to address this important question and provide guidance for clinicians in prescribing EGFRI in this patient population. Furthermore, TRACC data is reflective of real life patients as part of day to day practice compared to clinical trial participants.

Abstract 24
Title: Analysis of uptake of FOLFOXIRI regimen and outcomes in BRAF mutated patients with metastatic colorectal cancer in routine clinical practice
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Background
BRAF mutation has been reported in up to 10% of metastatic colorectal cancer (mCRC). BRAF mutated (MT) mCRC patients are generally resistant to standard therapies and have poor survival outcomes. Post hoc analysis of the TRIBE clinical trial suggests an aggressive treatment strategy (FOLFOXIRI plus bevacizumab) may be of greater benefit in BRAF MT mCRC patients. The aim of this study is to assess the uptake of FOLFOXIRI regimen in clinical practice and also to analyse its outcome compared to routine chemotherapy regimens in this patient population.

Methods
All the patients with mCRC in a multi-site Australian registry, TRACC (Treatment of Recurrent and Advanced Colorectal Cancer)7 from January 2006 to December 2015 will be examined for the frequency of BRAF gene mutations. Patients with known BRAF MT will be analysed for this study. Characteristics of BRAF MT patients and any impact of BRAF status on treatment approach and outcomes will be examined. Response, adverse events, and outcomes to FOLFOXIRI in BRAF MT mCRC patients will be examined in more details and it will be compared to the other chemotherapy regimens. Survival estimates will be calculated using Kaplan-Meier method with the log-rank test for survival comparisons. Variables will be compared using the Chi square method or t-test. Two-tailed p values of <0.05 will be considered significant. The study will be conducted in accordance with Ethical Guidelines for Biomedical Research Involving Human Subjects and it has been approved by Human Research Ethics Committees of all the participating hospitals in the TRACC database.

Results
Data collection and analysis are currently in progress and it will be completed by the end of September 2016 and the results will be ready for presentation and publication by the end of December 2016.

Conclusion
We believe our study can help to address this important question and provide guidance for clinicians in using FOLFOXIRI regimen in BRAF MT mCRC patient population. Furthermore, TRACC data is reflective of real life patients as part of day to day practice compared to clinical trial participants.

Abstract 25
Title: Can Mentalization Based Treatment be delivered by clinicians in a rural setting? A qualitative study.
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Background
Psychosocial interventions are known to be beneficial to sufferers of mental health; however psychiatric nurses often express anxiety about their level of competency in utilising psycho-dynamic therapy. Supervision for nurses in a group setting is recommended, thus increasing mental health workers’ understanding and confidence in delivering psychotherapy.

Mentalization Based Therapy (MBT) is evidence based psychotherapy derived from both traditional psychoanalytic concepts and recent neuroscientific research into the link between attachment processes and social judgement. MBT’s simple common sense approach is easier for therapists to learn and less overwhelming to accept for the target group of those diagnosed with Borderline Personality Disorder (BPD).

MBT consists of structures known to be effective in lessening the psychic pain and improving social function in BPD patients. The aim for clinicians to feel competent
to deliver MBT in a group setting supports findings that suggest the attachment process may be activated by group membership.

**Methods**
The qualitative study looks at the achievability of two mental health nurses (MHN) ability to undertake psychotherapy (MBT), and confidently commence a group therapy specifically for BPD clients.

Process consisted of supervision exclusively provided by senior leaders from a rural mental health facility, these leaders comprised of psychiatrists, psychologists, and specialist clinician from SPECTRUM (personality disorder specialist service).

The preparation and learning prior to the commencement of the group was completed over 2yrs with supervision held for 2hrs once a fortnight.

**Results**
The group commenced June 2015 and has successfully been running for nearly 12months.

The two MHNs are now more confident in delivering the psychotherapy MBT to clients in the group and have seen positive outcomes. The MHNs have also obtained extra skills suitable in assisting specific patients.

**Conclusion**
Providing psychotherapy is a necessary skill which can often be underutilized from MHNs. Nurses make up a large proportion of the workforce for mental health care in Australia. Therefore, they are critical for improving the quality of care received by people with major mental illness.

Mentalization based treatment can be delivered by clinicians in a rural setting; with further encouragement other areas of Mental Health may utilize this psychotherapy successfully.

**Abstract 26**

**Title:** ‘Your Diabetes, Your Say- Lower Hume Diabetes Research’

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**Background**
The Lower Hume Diabetes Working Group was established in 2015 to progress the work of the Hume Region Chronic Care Strategy in improving access, quality and coordination of local services to provide person centred diabetes care. Representation and active participation from a wide range of services across Mitchell and Murrindindi including hospitals, community health, local government, a local pharmacy and Murray PHN demonstrates the commitment to local systems improvement.

Lower Hume Primary Care Partnership (PCP) facilitates the working group to achieve their objectives of increasing communication and coordination with pharmacies, registering with the National Association of Diabetes Centres (NADC), and conducting consumer research to inform local systems improvements.

**Methods**
A survey was selected to collect consumer feedback regarding local services and suggestions for improved diabetes care. Lower Hume PCP assisted the working group to develop the survey and attain ethical approval. Distribution of the survey commenced in October 2015 through local health services, local media and community facilities, with the option to complete the survey online or hard copy. The collection period for the survey was extended from three months to six months and a supplementary focus group was facilitated by La Trobe University in the final week of the survey to gain further qualitative data.

**Results**
The surveys and focus group are currently being analysed, with a final report due by the end of July. An initial summary of the survey results, used to inform the focus group questions, identified 49% had at least one diabetes related complication, 31% did not know their most recent HbA1c reading, and 22% felt that diabetes impacted them emotionally. The focus group was able to pick up on the knowledge gaps from the survey results, and participants offered invaluable insight into strengths and weaknesses of the local service system.

**Conclusions**
Understanding the experience of consumers was recognised as an essential starting point for systems improvement work across Lower Hume. A mixed method approach to collecting consumer input has enabled a deeper understanding of local diabetes care and analysis of the data is likely to identify opportunities for continuous systems improvement.

**Abstract 27**

**Antimicrobial Stewardship in the High Risk Foot Clinic**

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Background
This paper describes the setting up of an Antimicrobial Stewardship (AMS) program and data from the multidisciplinary Goulburn Valley High Risk Foot Clinic (GVHRFC) located in Shepparton, Northern Victoria. The GVHRFC accepts patients with foot trauma ranging from cellulitis to chronic osteomyelitis. Patients are admitted to the GVHRFC from the community or post-acute setting with trauma and un-resolving infections, at times secondary to initial antimicrobial prescribing.

Methods
COMPONENT 1: Antimicrobial Stewardship AMS is a vital component in treating any infection but was absent at the setup of the GVHRFC.

Three months prior to the implementation of the AMS referral system, antimicrobial prescribing data, related to wound location and infection type, was collected. National prescribing guidelines guided appropriate prescribing. Wound pathology was assessed using the University of Texas Wound Classification system.

COMPONENT 2: The AMS provided advice on antimicrobials prescribing for complex wounds. These included wounds; with multi-drug resistant organisms, un-resolving on antimicrobial therapy; no osteomyelitis; and on antimicrobial therapy longer than 4 weeks. Microbiological data, patient history and local resistance patterns were assessed and AMS recommendations provided to the prescriber/s. An off-site Infectious Disease (ID) Consultant gave clinical about management of complex cases on a few occasions via telephone.

Results
The majority of initial prescribing originated from either general practice or from a recent in-patient admission. Over the study period seventeen referrals were made to the AMS Pharmacist and her recommendations were implemented in all cases. Two referrals were escalated to the ID physician. The majority of antimicrobial prescribing was undertaken by Nurse Practitioners (NP) after consultation with the AMS pharmacist and podiatrists.

Conclusions
The introduction of an AMS consulting service to the GVHRFC clinic has enhanced and changed prescribing practices through effective and timely antimicrobial use. The AMS program has also facilitated improved patient time to treatment, with NP prescribers and AMS pharmacist always available.

Abstract 28
Title: Does prior aspirin use correlate with reduced severity in patients presenting with acute pancreatitis?

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Background
Acute pancreatitis (AP) is characterised pathologically by pancreatic enzyme-triggered inflammation that causes both local cellular and systemic injury. Aspirin, a NSAID, is used widely to attenuate the inflammatory response in many disease processes. Studies to date suggest no clear consensus regarding the effect of NSAIDs on pathological and clinical severity in AP. This study sought to correlate prior history of aspirin use with severity of AP based on Ranson criteria.

Methods
Medical records were examined retrospectively of patients diagnosed with first-presentation AP in the 5-year period between 2010 and 2015 in Goulburn Valley Base Hospital, Victoria, Australia. Data on aspirin use, co-morbidities (hypertension, ischaemic heart disease, diabetes mellitus), Ranson criteria, markers of morbidity (length of hospital stay, ICU admission) were collected and analysed. The primary outcome compared Ranson score between aspirin and non-aspirin groups.

Results
Prior aspirin use was significantly associated with higher Ranson score at admission (P <0.001) and 48 hours (P = 0.003) compared with non-aspirin use. For aspirin users, Ranson score was 60% higher at admission (0.60 ± 0.14, 95% CI 0.33-0.87), and 64% higher at 48 hours (0.64 ± 0.21, 95% CI 0.22-1.05) than that of non-aspirin users.

Conclusion
The study suggests that prior aspirin use confers higher severity of AP on presentation.

Abstract 29
Title: Adolescent Violence in the Home: prevalence and service system capacity in rural Victoria

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Background
Adolescent Violence in the Home (AVITH) is increasing. In Victoria alone, police call-out data indicates a consistent 9% rise per annum from 2006. Community services are struggling to provide a cohesive response to this issue. This study examined the prevalence, risk factors and service system capacity regarding AVITH in Mitchell Shire within the Hume Region, a geographical location in central, north-east Victoria.

Methods
A literature review and subsequent needs assessment approach was undertaken, with multiple sources of evidence examined. Prevalence was mapped, considering change over time, with comparisons made across locations in the Hume Region and the metropolitan site of Frankston - a site for major service intervention. Service system capacity was assessed through a survey examining importance and availability of key areas identified from the literature and existing evidence-based interventions.

Results
The results of the study revealed that specific service funding was perceived by organisations to be the single highest need in regards to this phenomenon. In addition, contributing risk factors were identified as high in Mitchell Shire and other locations in the Hume Region.

Conclusion
Recommendations for the service system in Mitchell Shire included a collaborative approach for the establishment of assessment guidelines, referral pathways and protocols for responding to the disclosure of AVITH. To effectively support workers a quality service system response would involve the development of common standards of practice across these processes. The Service System Capacity Assessment Survey, developed for this study, may be a useful tool for other locations to evaluate gaps and needs in relation to adolescent family violence.

Abstract 30
Title: Diagnosis, Management and Outcomes of Four Major Cancer Types in a Regional Victorian Health Service

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Background
Almost one third of Australian population live outside major metropolitan areas. Current evidence suggests that cancer patients in rural and regional areas present with more advanced disease, have poorer outcomes, and shorter survival compared to their metropolitan counterparts. We propose a retrospective study to assess patient demographics, time to cancer diagnosis, treatment and survival outcomes in patients with breast, prostate, colorectal and lung cancers at Goulburn Valley Health in the last ten years.

Materials and Methods
The study will be conducted in accordance with Ethical Guidelines for Biomedical Research Involving Human Subjects after approval from Goulburn Valley Health’s Human Research Ethics Committee. Patients aged over 18 years who were referred, diagnosed or received treatment at Goulburn Valley Health for breast, prostate, colorectal and lung cancers from 1st of January 2006 to 31st of December 2015 will be included in the study. Information collected will include patient demographics, time from referral to oncology appointment/diagnosis/treatment, time from surgery to adjuvant chemotherapy, rates of chemotherapy administration and median overall survival. This data will be compared to the available data from one major metropolitan integrated cancer service, other Victorian integrated cancer services and the Optimal Care Pathways by Cancer Council Victoria. Factors influencing the management and outcomes will be explored in further detail.

Results & Expected Outcomes
Data collection and analysis are currently in progress. The aim of this retrospective research is to explore current patient outcomes in a regional Victorian Centre. This research also aims to identify the shortfalls and to suggest possible solutions to improve cancer services in regional Victoria.
Abstract 31

Title: Dietetic Follow up in the Pregnancy Clinic

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Background
Gestational Diabetes Mellitus (GDM) occurs in approximately 5–8% of Australian women during pregnancy. GDM is effectively managed by controlling blood glucose levels (BGLs), maintaining a healthy diet and regular moderate intensity physical activity. Women diagnosed with GDM at Goulburn Valley Health (GVH) are invited to attend a GDM group session with a nurse practitioner, diabetes educator and dietitian. The nurse practitioner and diabetes educator reviewed these patients post group session, with the dietitian only reviewing if dietary issues remained a concern. The nurse practitioner identified that women were often returning with elevated BGLs and regularly requiring insulin to control. It was hypothesized that some of these high BGLs could be decreased with individualised dietary intervention, with the potential to delay insulin initiation.

Aim
To demonstrate that increasing individual dietetic reviews would decrease the number of pregnant women with GDM requiring insulin to control BGLs.

Methods
A review of current practice was conducted and the program was changed to offer an extra individual session with the dietitian one week after attending the group GDM session. This a session aimed to consolidate knowledge learned in the group session, answer dietary questions in a timely manner and enable women to explore the relationship between food choices, activity and BGLs. Review sessions with the nurse practitioner and diabetes educator reinforced information the dietitian provided. Women were referred back to the dietitian should further dietary intervention be required.

Results
Informal feedback showed that dietetic follow up, one week post the GDM group session, was received positively by the women. Since the beginning of 2016, 69% of women have returned for their one week dietetic follow up. This increase in appointment attendance rates has led to a decrease in the number of women requiring insulin to attain euglycaemia. There has been a 34% reduction in the number of GDM women requiring insulin in 2016 as compared to 42% the same time period in 2014.

Conclusion
The addition of an individual dietetic appointment one week post a GDM group session improved attendance rates and resulted in a decrease in the number of GDM women requiring insulin.

Abstract 32

Title: Systematic review and meta-analysis of efficacy, bleeding complications and surgical site complications with venous thromboprophylaxis in patients post total hip and knee arthroplasty

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Introduction
Venous thromboembolism (VTE) causes significant morbidity and mortality in total joint arthroplasty patients. Despite multiple systematic reviews and network meta-analyses, there is still currently a lack of evidence for or against different thromboprophylactic agents. Some orthopaedic practitioners are reluctant to use potent anticoagulants for fear of wound complications such as wound drainage and haematoma, which may predispose to prosthetic joint infection. There is currently no systematic review comparing surgical site bleeding complications of thromboprophylactic agents.

Aims
The primary aim of this review was to compare the efficacy of thromboprophylactic agents, with the outcome of total VTE. The secondary aim was to compare the safety outcomes of clinically-relevant bleeding and as surgical site bleeding episodes.

Methods
A systematic review of randomised-controlled trials published between 1990 and 2015 was performed. Studies including patients post total hip or knee arthroplasty treated with the following were considered: LMWH, warfarin, rivaroxaban, apixaban, dabigatran, aspirin and placebo or control. A meta-analysis was performed for efficacy and safety outcomes.

Results
Rivaroxaban was more effective at preventing DVT than LMWH at a cost of increased risk of clinically relevant bleeding. Apixaban has a greater efficacy but a decreased risk of bleeding compared to LMWH. Dabigatran was similar to LMWH in both efficacy and bleeding. LMWH had a significantly increased risk of surgical site bleeding compared to apixaban and dabigatran, but similar to rivaroxaban. When compared to control or warfarin, LMWH had a greater efficacy, bleeding and surgical site complications. The incidence of PE was similar across all agents.
Abstract 33

Title: Hume Survivorship Project

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Background
Improvements in the rates of early detection and treatment methods have led to an increased number of people surviving cancers in Victoria. Unfortunately, research shows that cancer survivors in Australia report a statistically significantly poorer health status across a range of measures, when compared with age and sex matched control subjects. In 2011, the Victorian Department of Health and Human Services formed the Victorian Cancer Survivorship Program; this program is aimed at improving the overall health status of survivors in Victoria. In 2015, the Hume region secured funding to translate and implement the findings from the survivorship project that was run at Barwon health; this led to the development of the Hume Survivorship Project. The Hume Survivorship Project has partnered with the University of Melbourne to evaluate this program; results are due at the end of 2016.

Methods
A nurse led service aiming to provide supportive care and high quality information to people who have completed treatment for cancer. The aim is to provide cancer survivors with health improvement strategies, access to screening and prevention interventions, rehabilitation and local support services in the wider community.

Results
Since its inception in September 2015, The Hume survivorship service has received over 60 referrals from a range of sources. Each referee is given the opportunity to discuss potential issues or areas of concern with the survivorship nurse, who then provides patient specific information and multidisciplinary referrals. Survivorship screening tools are used to assess the supportive care needs of patients in a nurse led consultation and survivors are also invited to participate in group wellness programs; these programs are run in collaboration with the Cancer Council Victoria.

Conclusion
Previous research shows that the number of cancer survivors is on the increase, and issues or concerns may arise for people after treatment is complete. The survivorship service gives people the opportunity to discuss their survivorship concerns with a specialist cancer nurse, who can provide them with support and guidance so that they can move forward with their lives.

Abstract 34

Title: An exploration of hospital emergency department visits for dental problems

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Introduction
People suffering dental problems attend general hospital emergency departments (ED). ED staffs often have no formal dental training in either assessment or treatment of dental problems nor are care pathways in place for non-dental health practitioners.

Objectives
To describe the experience of a pathway to care that involved a dental ED visit, discover the essence of such a pathway and suggest how the pathway may be improved.

Methods
A transcendental phenomenological methodology was employed. A convenience sample of 15 English speaking adults who had made dental ED visits at the Bendigo Hospital were interviewed. Transcribed interviews were analysed using Moustakas’s modification of Van Kaam’s method.

Findings
Three overarching textural themes were described, living with dental problems, barriers to dental care and the ED experience. Living with and self-managing a dental problem was a common occurrence.

Barriers to dental care prevented timely dental visits and prompted care seeking from non-dental health practitioners. Swelling was both a barrier and facilitator of dental care. There was a belief that dental treatment could not be provided whilst swelling was present and management relied upon the prescription of antibiotics and painkillers.

Unbearable symptoms prompted ED visits. The ED was chosen because it was accessible and a place where you would be cared for. ED staff lacked knowledge about how to access the public dental system and emergency dental care.

In each pathway distress was the underlying structure present for participants and those around them and was the trigger that prompted an ED visit.

Conclusion
Multiple barriers exist to accessing emergency dental care. There is no clear pathway from the Bendigo Hospital ED to dental care which results in extended care pathways. The ‘essence’ of this experience is that the teeth have become disconnected from the rest of the body.
Abstract 35

Title: Recognising Salt Wasting Nephropathy. Part 1 Symptoms

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Aims
To increase awareness of tubular-interstitial pathology.

Background
Routine nephrological investigations only provide assessment of glomerular functions (i.e. e-GFR and proteinuria). When these are abnormal sodium retention is a frequent finding. My experience suggests that approximately 15% of patients seen in my clinic may have salt wasting. Recognition of this may well be indicative of renal tubular pathology and important in their care.

Methods
Retrospective study of case histories, for symptoms of salt depletion (thirst, postural dizziness, cramps), along with other associated symptoms, including nocturia, dysuria, alcohol sensitivity, headache, loin pain and enuresis. Alternative causes for salt wasting were excluded such as diuretic treatments and stoma losses.

Results
The presence of two or more of these symptoms in fifty patients identified by me as salt wasters gave best sensitivity and specificity (92% and 83%), compared to a group of 42 patients with biopsy proven GN (24 patients) and adult polycystic kidney disease (18 patients). Using three symptoms increased specificity to 90% but reduced sensitivity to 74%. Reliance on the presence of only one symptom increase sensitivity to 96% but reduced specificity to 60%.

Conclusions
Salt wasting nephropathy can be readily identified from the clinical history. This might provide valuable clinical insight and identify patients for further study.

Abstract 36

Title: Recognising Salt Wasting Nephropathy (SWN). PART II, SIGNS

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Aim
To increase awareness of tubulo-interstitial pathology.

Background
SWN is a feature of tubulo-interstitial pathology and in my experience is more common than glomerulonephritis. Without awareness of the clinical features, its presence may go undetected, as there may be no evidence (abnormal eGFR or urine dipstick) of chronic kidney disease (CKD).

Methods
Review clinical records of 50 patients identified as SWN, whose symptoms were described at ANZSN 2013, to identify eGFR (MDRD), dipstick urinalysis and 24 hour protein excretion. Collate scanning reports, blood pressure measurement and treatments, along with other relevant signs.

Results
Six men and 44 women, mean age 46.8 yrs (range 25 – 92). 68% of patients with appropriate data would not have been classified with CKD according to eGFR criteria. 1 had CKD 1, 20% had CKD 2, 9% had CKD 3. Haematuria was noted in 23%, proteinuria >0.15 g/24hrs was present in 2 patients, glycosuria in 3 patients and urine pH of 7 or over in 62%. Anti-hypertensives were required in 16%. The mean blood pressure of the untreated group was 118/74. In 22 patients eGFR improved by a median of 7 ml/min/1.73m2 [range 1-37], over a median follow up of 15 months [range 1-107]. In 9 patients, eGFR deteriorated by a median of 10 ml/min/1.73m2 [range 2-35], over a median follow up period of 14 months [range 3-89]. Urinary tract infections were documented in 60%. Small or scarred kidneys were seen in 29%.

Conclusions
SWN is a significant public health threat, which with recognition and correction, may offer insights into common clinical problems.

Abstract 37

Title: Introducing information technology systems to a change weary workforce: Applying Action Learning as an alternative change management approach to introducing information technology systems in healthcare.

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Background
Health service provision today operates within a dynamic environment of innovation and expeditious change with a constant demand for its workforce to evolve and adapt at an equal pace. One of the most rapid change dynamics
in healthcare has been the industries response to the evolution of information technology and its plethora of applications across the clinical and operational management domains.

Whilst information technology has seen some of the most innovative advancements in healthcare it has also posed significant challenges for those charged with management responsibility for its successful implementation and even greater challenges for the end users, the ‘change weary’ workforce.

Workforce readiness for change appears key to the effective dissemination of innovation with little available evidence to support the notion of ‘quick fix’ approaches to driving change offering as a successful or sustainable strategy. The propensity in health care to establish ‘quick fix’ resolutions to IT challenges is cited as attracting workforce ‘workarounds’, where staff adapt and shape their environments, develop behaviours to get the job done, and employ strategies to manage gaps.

This presentation evaluates the application of an Action Learning as an alternative and sustainable approach to introducing IT systems to a healthcare workforce

Methods
Over a six month period care staff in a small rural health service formed an Action Learning Team to support the introduction of a software system and applied Marquardt’s (2011) framework for problem solving through critical systems thinking and reflective practice. Thematic analysis from the teams reflective journals were reviewed and summarized and a survey instrument designed to elicit both quantitative and qualitative data from staff as to the effectiveness of Action Learning change management process was undertaken

Results
On evaluating the qualitative and quantitative data it is evident that the Action Learning approach to the software implementation process was embraced by staff as an alternative approach to implementing change with general feedback from the workforce indicating a strong sense of ownership over the successful implementation of the software program.

Conclusions
Action Learning offers as a viable and sustainable alternative to traditional change management approaches to introducing information technology systems to the workplace.

Abstract 38

Title: A retrospective audit on door-to-antibiotic time for patients presenting with febrile neutropenia at a regional Victorian hospital.

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Background
Febrile neutropenia is a common oncologic emergency and requires appropriate and urgent treatment for best outcomes and to reduce morbidity and mortality. The Australian consensus recommends a target door-to-antibiotic time of less than 1 hour for patients presenting with febrile neutropenia. This retrospective audit aims to investigate if the door-to-antibiotic target time is being met, and if the management of patients with febrile neutropenia is in accordance with Goulburn Valley Health’s guidelines.

Materials and Methods
This audit will be conducted in accordance with Ethical Guidelines for Biomedical Research Involving Human Subjects after approval from Goulburn Valley Health’s Human Research Ethics Committee. Adults aged over 18 years presenting with febrile neutropenia while on chemotherapy for solid organ and haematological malignancies from 1st January 2013 to 31 December 2015 will be included. The treatment of febrile neutropenia at Goulburn Valley Health will be audited against the Australian consensus’ recommended door-to-antibiotic time of 1 hour. Information on patient demographics, diagnosis and chemotherapy regimens was collected. Other parameters that were assessed included compliance with collecting blood cultures and if antibiotics used were in accordance with the hospital’s febrile neutropenia guidelines.

Results and Expected Outcomes
Data collection and analysis are currently in progress. The aim of this retrospective audit is to assess the management of febrile neutropenia at a regional Victorian Health Service and assess if this in accordance with the recommendation of the Australian Consensus.

Abstract 39

Title: Prevalence of Salt Wasting Nephropathy (SWN) in Primary Care: Preliminary findings.

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Aims
To determine the prevalence of SWN in Primary Care.

Background
In specialist nephrology clinics SWN has been recognized in approximately 15% of patients. SWN reflects renal tubular pathology, there are no current tests for it, standard tests for renal function only look at Glomerular function. SWN can be implied in patients with features of dehydration, when other causes of dehydration have been excluded.

Methods
Ethical approval was obtained, to allow patients attending routine general practice clinics, to voluntarily fill out a questionnaire. From the responses, patients could be grouped according to whether they had diabetes mellitus (DM), were currently taking diuretics (D), had vomiting or diarrhea (salt wasting enteropathy, SWE), features of dehydration with no obvious cause(SWN), or no obvious features of dehydration(control).

Results
To date 195 responses have been collected. There are 80 (41%) controls, 68 (35%) with SWN. 18 patients were taking diuretics, 22 had SWE and 10 had DM, with overlap amongst these latter 3 categories. 4 questionnaires could not be determined. There is a female preponderance throughout but particularly in the SWN group (75% vs 65% control). This finding has been identified before.

Conclusions
SWN appears more prevalent than expected. This may be an important public health discovery.

Abstract 40
Title: Diagnostic difficulty for isolated fallopian tube torsion: An atypical case presentation
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Background
The estimated annual incidence of isolated fallopian tube torsions is 1 in 1.5 million women. The lack of specific clinical signs, images, and laboratory data make preoperative diagnosis difficult.

Case Presentation
A 29-year old nulliparous lady, referred by GP, with a 3 days history of worsening right iliac fossa pain. She described colicky pain, radiating to the right flank, 3-5/10 intensity which progress to 6/10 intensity over 24 hours. Pregnancy test was negative.

Pelvic ultrasound & CT scans showed an enlarged right ovary, measuring 5.8 x 3.7cm in diameter with no blood flow and moderate fluid around it and in the pouch of Douglas. This was suspicious for torsion of the right ovary. The patient had a diagnostic laparoscopy.

Laparoscopy revealed torsion of the right fallopian tube with necrosis and swelling. The uterus, both ovaries and left fallopian tube were normal. The right fallopian tube was excised laparoscopically without complications. The pathological examination was reported as “sections from fallopian tube show extensive haemorrhage and oedema of the wall with infarction of plicae that would be consistent with torsion”.

Postoperative recovery was uneventful and the patient was discharged home on day one of postoperative period. She was seen in the gynaecology outpatient clinic one week later and reported no significant problems.

Discussion
Torsion of the adnexa is quite uncommon. The difficulty in diagnosis, diversity of presentations and variety of possible causes is clearly documented in the literature. In this patient no obvious cause for the torsion was found. Histology revealed no underlying pathology. Of note, there was no evidence of hydrosalpinges and the contralateral tube looked normal.

The sonographic and computed tomographic appearances of isolated fallopian tube torsion, including serial changes over 48 hours, have been well recognised and described in the literature. As alluded to earlier, both ultrasound and computed tomography scans were not diagnostic but significantly, suggested the likelihood of an adnexal pathology. This justified our management plan although unfortunately, reduced the chances of finding a salvageable organ.

Abstract 41
The early Goulburn Valley Health (GVH) experience with surgisis biograft for pelvic organ prolapse repair.
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Background
Pelvic organ prolapse (POP) occurs when the tissues that hold the pelvic organs in place become weak or stretched. Thirty to fifty percent of women may experience POP in their lifetime with 2 percent developing symptoms1.

Methods
We reviewed a retrospective cohort of women who underwent vaginal hysterectomy, anterior & posterior repair using surgisis biograft, bilateral sacrospinous fixation, mid-urethral sling procedure (TVT-O/ TVT-Abbrevo) plus check cystoscopy. Indications for surgery included genuine stress incontinence and POP ranging from international continence society (ICS) pelvic organ prolapse quantification (POQ) stages 2-5, (Median stage-2.5).

Results
Ten patients fitted the criteria. Mean age was 56.4 yrs. Mean admission duration post-op was 2.2 days. The median pain score (with movement) was 3. Three patients were discharged home with an indwelling catheter. Two had failed their post-op trial of void (TOV) the other had an iatrogenic bladder injury. All three had their catheter removed between post-op day 7 and 10. Two patients had urgent infection with proven urinary tract infection [E. coli]. Their symptom improved after receiving a seven days course of oral antibiotics. Two patients were re-admitted for suspected vaginal infection and graft extrusion. However, high vaginal swabs from both patients failed to culture any bacteria. None required a return to theatre. All our patients had low pain scores on their day of discharge. At the time of writing this paper, only four patients had returned for further post-op checks (between 4-8 months). None had any evidence of residual POP.

Conclusions
With the increasing number of complications associated with the use of synthetic grafts for POP repair, biologic grafts appear to have a place in primary POP surgery in carefully selected patients. With the paucity of data in the literature regarding use of biologic grafts for primary POP repair, we are in the process of developing an excellent, single site series. It is hoped that in due course, this will provide significant information to databases such as urogynaecologic society of Australia.

Abstract 42

Title: Concept, situation and current management options for Foetal Alcohol Spectrum Disorder (FASD)/Foetal Alcohol Syndrome (FAS) in the Hume region.

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Background
Foetal Alcohol Spectrum Disorder (FASD) is a wide range of severe behavioural, physical and neurological deficits caused due to maternal alcohol intake during pregnancy. The most common presentation of FASD is Foetal Alcohol Syndrome (FAS). Underlying brain damage in FASD requires a multi-disciplinary approach to treat or manage the condition. The main aim of this project is to understand the concept of FASD/FAS from the healthcare providers and pregnant mothers in the Hume region. And to document the requirement and availability of FASD/ FAS care service facilities in the Hume region.

Methods
The study will include in-depth interviews of key informants, Focus Group Discussions (FGDs) and a survey. Two FGDs would be carried out among pregnant women attending Goulburn Valley Hospital (GVH) for antenatal clinics in a group of 5-7 women regarding their knowledge of FASD.

Key informants will be identified after a series of meetings with regional partners and experts that will include obstetricians, paediatricians, general practitioners, nurses and midwives. The team will contact approximately 12-15 key informants and request their informed consent and make appointments for in-depth interviews regarding FASD. Each key informant will be interviewed only once for this study. The interviews will be recorded in a mini recorder and subsequently transcribed and analysed.

In addition, a survey questionnaire will be introduced for both groups of participants.

Expected outcomes
The study will generate the ideas on the magnitude of FASD problem in the region, readiness of the health service delivery organizations for providing FASD services and necessitate the importance of setting up a FASD clinic in Hume region.

Conclusions
The understanding of FASD has not been investigated in the Hume region. As FASD requires primary and secondary prevention to minimize the chronic disabilities of the disorder, it is important to have a general understanding of the condition. Our study will address the level of knowledge available regarding FASD in the general public and in health professionals. This will give an indication as to who and what is required to provide more information regarding FASD for primary and secondary prevention.

Healthy Communities
Abstract 43

Title: Budd Chiari Syndrome case presentation and literature review

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Background
Budd Chiari Syndrome (BCS) is defined as a hepatic venous outflow tract obstruction. This obstruction is independent of the mechanism, provided it is not due to cardiac disease, pericardial disease or veno-occlusive disease. BCS often clinically manifests as abdominal pain, ascites and hepatomegaly. BCS is predominantly prevalent in the West with different predispositions to gender and aetiology when compared to the East. However, due to its rarity and often insidious onset, the syndrome is only described based on small studies of prevalent cases.

The Case
We present a case of a 28 year old female with no previous comorbidities who presented to the Emergency Department of Goulburn Valley Health with a 3 day history of abdominal pain and distension with evidence of ascites and hepatomegaly on clinical examination. When investigated, she had markedly elevated liver transaminases, white cell count, C reactive protein, INR and APTT, as well as evidence of portal hypertension. Quadriphase CT scan showed occlusion of the hepatic vein. She was transferred to Austin Health where she underwent a Transjugular Intrahepatic Portosystemic Shunt (TIPS) successfully and was discharged from hospital with clinical and biochemical improvement.

Future plan
A literature review will be done to highlight the prevalence, aetiology and varying manifestations of BCS in different demographics and regions, as well as to review the current guidelines of diagnosis and management of this rare condition.

Abstract 44

Title: Management of STEMI in a rural health setting.

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Objective
To assess the quality of care of patients with ST segment elevation myocardial infarction (STEMI) in rural health setting.

Design
Retrospective review of patients’ records with confirmed diagnosis of STEMI during the period 1st of January 2014 to 18th November 2015. Quality of care assessed using guidelines from the Australian National Heart Foundation/ Cardiac Society of Australia and New Zealand.

Setting
Goulburn Valley Health is a rural hospital provides care for a catchment population of approximately 120,000 people from the City of Greater Shepparton ranging up to southern New South Wales. Owing to its location, fibrinolysis is offered to patients with diagnosed STEMI.

Outcome Measures
We assessed the following measures: time between hospital presentation to first ECG, door to needle time, rate of adjuvant therapies post thrombolysis and rate of transfer to a hospital with percutaneous coronary intervention (PCI) capabilities.

Results
During the study period, there were 69 cases of confirmed diagnosis of STEMI. Mean patient age was 64 (SD=14 years) and 65% of the patients were males. 75% of patients were brought to hospital by ambulance. Median time to first ECG was 10 minutes (IQR: 8, 18). In terms of ECG findings on presentation, 96% of ECGs showed ST elevation, 3% new LBBB and 1% ST depression. 59% of patient had inferior infraction, 32% anterior infarction and 7% lateral infarction. The median door to needle time was 36 mins (IQR: 25, 50) with only 35% of patient received thrombolysis within 30 minutes. In terms of recommended adjunctive therapy post thrombolysis, 90% of patients were prescribed clopidogrel and 98% were prescribed LMWH or heparin. In hospital outcome included 4 deaths and 6 patients who suffered re-infarction. 69.5% of patients were transfer to PCI equipped hospital within 6 hours and 90% within 24 hours.

Conclusion
This audit shows the quality of care for a patient presenting with STEMI at GVH was adequate and concordant with our national protocols. However, the door to needle time was longer than recommended and we would suggest that more comprehensive strategies are required to improve pre-hospital notification and to shorten response times by medical teams.
Abstract 45

Title: Diabetes management in rural general practice

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Background

Diabetes Mellitus Type 2 (DMT2) is a chronic, progressive metabolic disease that is an international epidemic. GPs are the cornerstones of DMT2 management and regular reviews on whether lifestyle and clinical targets are being reached among those living with DMT2. The aim of this study was to determine the scope of care and management of patients with DMT2 within General practice, while highlighting areas of success and areas where improvement can be made.

Methods

Demographic and laboratory cross sectional data were collected by examining electronic patient records at one general practice to address the aims of the study. Data included key management parameters of HbA1c, eGFR, microalbuminuria, blood pressure and cholesterol levels, in addition to age, sex, and residential postcode. Further, data regarding the use of insulin, antihypertensive medications and lipid-lowering medications was collected and analysed.

Results

A total of 294 electronic patient records were examined. Glycaemic control was shown to have clinically improved over time, with only 10.8% of patients having poor control at their latest test. However, only 35.4% of patients had been referred for diabetes education and only 32.9% of the patients with suboptimal or poor control had been referred to a diabetes clinic. Examination of eGFR showed an overall decline in patient kidney function consistent with aging. However, it was found that males were significantly more likely to have microalbuminuria with increased severity than females. Documented screening for diabetic retinopathy and neuropathy was found to not be in compliance with the national recommendations in over 35% of patients.

Conclusions

The study demonstrated an overall clinical improvement in the diabetic control of patients and identified at risk subpopulations. The findings suggest the need for continuous patient motivated management, while highlighting areas for improvement that impact greater patient health outcomes, avenues for increased revenue and service sustainability.

Abstract 46

Title: Bacteremia pattern in febrile neutropenia among adults cancer patients receiving chemotherapy in an Australia regional hospital.

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Background:

Febrile neutropenia (FN) remains one of the most concerning complications of cancer chemotherapy, and is a major cause of morbidity and mortality, consuming significant healthcare resource. Even though fever occurs frequently only 20-40% of FN episodes in these patients are due to bacteremia. This audit was carried out to determine the pattern of microbial pathogens responsible for FN in our institution as this will result in the appropriate choice of empirical antibiotic(s) for treatment of FN in the future.

Methods

This is a retrospective audit of adult patients with cancer admitted with FN post chemotherapy in Goulburn Valley Base Hospital, Shepparton, Australia between 2013-2014. Only patients who met the diagnostic criteria of FN as defined by the Infectious diseases Society of America (IDSA) were included in the audit.

Results

Twenty six patients presented with 31 episodes of FN between January 2013 and January 2014. 65 blood cultures (BC) were obtained with an average of 2.5 sets of BC per patient. 10.8% of these were positive. 66.7% of the BC yielded gram positive cocci (GPC) (50% of which were coagulase positive staphylococci), 33.7% of the BC yielded gram negative bacilli (GNB) and 2 yielded multiple organisms. The detail is shown in table 1.

The mean neutrophil count on admission was 0.303 ±0.25/ul. Those with positive BCs had significantly higher hs-CRP than those with negative BCs with (223.83 ±94.27 mg/l vs 89.37 ±79.53 mg/l, t-test = -3.489, p=0.002). The most common malignancies were hematological and breast cancers with 8 patients each. The presumed focus of infection was mostly in the respiratory tract accounting for 42% of the cases followed by genitourinary tract (22.2%). 30.8% of the 26 patients had central venous access device (CVAD) in-situ all had negative BCs with the odd ratio of developing FN if CVAD is present of 4.3 (95% CI 1.01-18.0).
Table 1: Microbial isolates from blood cultures of cancer patients with febrile neutropenia.

<table>
<thead>
<tr>
<th>Isolated organisms</th>
<th>No. of isolate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coagulase positive staphylococcus</td>
<td>3 [33.3]</td>
</tr>
<tr>
<td>Staphylococcus aureus</td>
<td>1 [11.1]</td>
</tr>
<tr>
<td>Streptococcus Group C beta hemolytic</td>
<td>1 [11.1]</td>
</tr>
<tr>
<td>Enterococcus Faecum</td>
<td>1 [11.1]</td>
</tr>
<tr>
<td>Escherichia Coli</td>
<td>1 [11.1]</td>
</tr>
<tr>
<td>Pseudomonas Spp</td>
<td>1 [11.1]</td>
</tr>
<tr>
<td>Acromonas Sobia</td>
<td>1 [11.1]</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9 [100%]</strong></td>
</tr>
</tbody>
</table>

Figure 1: Focus of infection in patients with febrile neutropenia post chemotherapy

Abstract 47

Title: Benign transient hyperphosphatasemia in infancy associated with adenovirus infection – A case report

Authors: Christine O’Leary1, Nobia Abidi1, Khaled Hassan2

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Background

Transient Hyperphosphatasemia (TH) of infancy and early childhood is thought to be a benign condition with a raised serum alkaline phosphatase (ALP) occurring in the absence of liver or bone disease. Awareness of it allows practitioners to avoid unnecessary investigations. The aetiology of TH is unknown however it has been described in association with various infectious agents with only a few reports with adenovirus.

Case

A 10 month old, previously well girl was reviewed by her doctor for a mild gastroenteritis-like illness. This was preceded by 2 weeks of rhinorrhea. Blood tests conducted by her doctor, including a liver function test (LFT) revealed a serum ALP ten times the upper limit of normal [4144 U/L]. She was referred to hospital for investigation of this isolated enzyme derangement.

Apart from diarrhoea, her examination was normal. Her subsequent laboratory work up confirmed isolated derangement in ALP with all other transaminases in the normal range, as were her renal function, calcium, phosphate, parathyroid hormone and vitamin D levels. Ultrasonographic examination of her abdomen was normal. PCR of faecal and nasopharyngeal samples were positive for adenovirus.

A diagnosis of TH was made on the basis of normal investigations and a return of her ALP to normal in four weeks.

Discussion

TH is a rare entity which has only been described in a few case reports and series. It should be suspected in an otherwise healthy child with a normal clinical examination and no evidence of liver or bone disease in whom the ALP normalises within four months. Awareness prevents a multitude of invasive and expensive tests being carried out.

The aetiology of TH is unknown but it has been reported in association with respiratory and gastrointestinal infections particularly febrile diarrheal illnesses cause by C. difficile, Epstein - Barr virus and cytomegalovirus. It has been associated with adenovirus in a few case reports and this will add to the body of evidence supporting an infectious trigger of TH.

Conclusions:

This audit shows that the prevalence rate of bacteremia in post chemotherapy FN is relatively low and the pattern of the microbes is similar to those reported in other studies with GPC been the most common isolate.
Abstract 48

Title: Port-a-cath related complications in Oncology patients at Goulburn Valley Health

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Background
Port-a-caths are routinely used for long-term intravenous chemotherapy. Port-a-caths related complications were observed in the Goulburn Valley Health oncology population; presenting an opportunity to improve practice through further investigation. Established rates of failure for port-a-caths vary between 7.57% and 8.73% of implantations; variation may depend on device type, differing usage and definitions. Failures of port-a-caths require further investigation may delay treatment and necessitate surgical intervention.

Methods
All patients who had a port-a-cath insertion from 2012 to 2015 were identified by the Health Information Service (HIS) of Goulburn Valley Health, and their details provided to us. Approval for this audit was received from the institution’s Ethics Committee. Medical records of each patient, identified by HIS as having had a port insertion, were manually reviewed for any episodes of port-a-cath insertions and record treatment received through the Oncology department. Only patients of the Oncology department had surgical details of their port-a-cath insertion collected; and were then checked for complications at each of their treatment visits, which were also collected. Data will be analysed using SPSS version 22.

Results and Conclusions
All data has been collected. There were 96 Port-a-Caths insertions amongst 84 patients. Forty-nine percent (n=47) of cases noted deterioration of the implant. The most common pattern of deterioration being recorded as intermittent (42.55%, n=20) followed by abrupt (36.17%, n=17). The median time from insertion to failure was 25.50 days (IQR=93.50). The rate of failure is 40.23% (z = 8.41, p < .001) higher than other studies however the criterion used to define deteriorating cases varies considerably between studies and further data is required to conduct a reliable comparison with established benchmarks. Further analysis of the current dataset is underway to establish common patterns of Port-a-Cath failure. The result of this audit is expected to inform future practice, optimising the existing standard of care.

Abstract 49

Title: The patterns of computed tomography pulmonary angiography (CTPA) use for diagnosis of pulmonary embolism (PE) at Goulburn Valley Health

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Background
Pulmonary embolism (PE) is a life-threatening condition that requires accurate diagnostic imaging. CTPA is the investigation of choice for people with suspected PE in setting of normal kidney function. Several studies showed this test is being over employed without using available predictive tools i.e Wells score, Modified Geneva score, D-Dimer.

Objectives
1. To evaluate the appropriate use of CTPA (overuse / underuse /the rate of positive results).
2. To check the degree of adherence to current CTPA use guidelines
3. To calculate the rate of contrast induced nephropathy.

Design
Retrospective review of patients’ records who had CTPA for PE during the period 1st of September 2015 to 18th January 2016.Patients demographics and components of different scoring system were obtained by manual review of patients electronic records.

Result
We have a total of 92 CTPAs were done during the study period. We excluded three CTPAs due to insufficient clinical details .In term of patient demographics, mean age was 64 years and 52 % (n= 46) of patients were female. The most common symptom was SOB (presented in 72% of patients). D.Dimer was tested in only 25(28%) patients. PE was diagnosed in 8 (9%) patients and CTPA was non-conclusive in 2 (2%) patients. In PE group ,according to modified Geneva score ,1 (12.5 % ) of the patients had low and 7 (87.5% ) had intermediate clinical probability ,white with Wells scoring 5 (62.5% ) had low and 3 (37.5% ) had intermediate clinical probability for PE .

In Non -PE group, 27 (34%) had low, 49(62%) had intermediate and 3 (4%) had high clinical probability according to modified Geneva score .Also, 64(81%) had low, 14(18%) had intermediate, 11% had high clinical probability as per Wells score.
44 (49%) patients had kidney function rechecked after CTPA and 6 (14%) patient had acute kidney injury.

Conclusions
Our positive rate of CTPA was only 9% which is lower than reported rate in literature. This can be explained by the poor utilization of risk assessment tools (Geneva, Well and D-Dimer). Appropriate use of D-Dimer and adherence to guidelines will minimise the rate of unnecessary CTPAs.

Abstract 50
Title: Diabetes in Pregnancy Clinic
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Background:
The Australian Diabetes in Pregnancy Society (ADIPS) recommend a team approach for managing women with diabetes, comprising an obstetrician, diabetes physician, midwife, diabetes educator and dietitian co-located. The Goulburn Valley Health (GVH) diabetes team noted some women with Gestational Diabetes (GDM) were not attending their diabetes appointments in addition to the separately located, antenatal clinic, resulting in women regularly requiring insulin to control hyperglycaemia. Barriers to clinic attendance revealed: physical distance, and duration of, clinics; timing with school pick up and transporting preschool children. It was hypothesised that hyperglycaemia could decrease with further intervention, decreasing or delaying the commencement of insulin.

Aims:
To improve and streamline the GDM pregnancy and diabetes service.
To advocate lifestyle changes achieving euglycaemia, reducing the number of women requiring insulin during pregnancy.

Methods:
Retrospective data was audited for Jan - April 2014 and 2016 with respect to gestation week and frequency of insulin use for women with GDM. An evaluation was designed to email GDM women investigating the frequency, and types of contact women have with diabetes staff; consumer preference for meeting diabetes staff and opinion sought with regards to multidisciplinary care. The Credentialed Diabetes Educator (CDE) was co-located at the antenatal clinic 1-2 days a week and attended at the weekly diabetes clinical meeting.

Results
Data comparison from 2014 and 2016 demonstrates a 10% decrease in women requiring insulin. Informal verbal feedback received from both women and staff to date has been positive, enabling women more frequent access to the diabetes team, enhancing euglycaemia. Strategies were identified to address the women's including: dietetic review appointment one week post initial GDM group education; structured diabetes education and dietetic consultation at 32 and 36 weeks gestation. CDE co-location at the antenatal clinic has been received positively by women and staff involved and attendance at clinical meetings has increased knowledge with regards to GDM risk factors and screening tools.

Conclusion
The multidisciplinary antenatal and diabetes service has been co-located and streamlined. Attendance rates and relationships between the diabetes and obstetric teams have improved resulting in a decrease in the number of GDM women requiring insulin.

Abstract 51
Title: Exploring barriers and enablers to the use of two-way information technology to manage diabetes in adults. A systematic review
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Background
The purpose of this systematic review was to explore the barriers and enablers faced by adults with diabetes utilising two-way information communication technologies to support diabetes self-management.

Methods
Relevant peer reviewed literature was obtained by searching five databases: EBSCOhot CINAHL, Ovid Medline, Proquest Central, Embase and Cochrane Library. Four major constructs related to the research question were used: adults with diabetes; biomedical technology; communication technology and patient utilisation.

Results
A total of 8430 articles were identified. After removal of duplicates and excluded articles forty-eight were included in the review. Multiple factors impacted on patient usage and adoption, primarily relating to
three key areas; the individual, the technology and the environment in which the technology was used. Key barriers included poorly designed interfaces requiring manual data entry and systems that lacked functionalities valued by patients. Key enablers included access to reliable technology, highly automated data entry and transmission, graphical display of data with immediate feedback, and engaged and supportive health care professionals and family members.

Conclusion
The literature indicates technology adoption is most likely if systems are designed to provide solutions to clinical and behavioural problems that specific patient populations identify as priorities, and the resultant technology should be as automated, streamlined, mobile, low-cost and integrated as possible in order to limit the burden of usage for the patient and maximise clinical usefulness. End-users should be consulted in the design process and consideration should be given to theories of technology adoption to inform design and implementation.

Abstract 52

Title: Assessment of Care for Families Living with Type 1 Diabetes.

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Background:
Diabetes care of children and adolescents requires a multidisciplinary approach. In the Goulburn Valley some families choose to travel to the Royal Children’s Hospital to access diabetes services, while the majority utilise specialist care at GV Health (GVH). Prior to 2014 the GVH paediatric diabetes educator, a sole practitioner, was tasked with 24 hour responsibility for inpatient and post admission care. This service has now been integrated with the GV Diabetes Centre (DC) for 2 years with differing skill levels/experience amongst team members working with children and their families. Concurrently the Goulburn Valley Type One Peer Support (GV TOPS), formed in 2014, works with the DC to better meet families ongoing needs.

Aim
This quality improvement activity aimed to evaluate consumer needs and the capacity of GVH DC to meet the requirements of children and adolescents with diabetes.

Methods
The Patient Assessment of Chronic Illness Care (PACIC) instrument validated in chronic illness was used with additional questions; focusing on perceived needs, wants, and outcomes. Online distribution by way of Survey Monkey was used, with a hardcopy option available.

Results
Of 60 families invited to participate 17 responded (28%); 53% of respondents accessed the diabetes centre more than 3 times in the preceding 6 months. Opinions varied regarding initial inpatient experiences at diagnosis; ranging from traumatic to supportive. Lack of communication between various clinicians resulted in families waiting long periods for reviews. Most (57%) were satisfied that care was well organized. Families were generally well supported (81%) in setting self-management goals but not always given a written plan. While 94% felt they were included in discussions at clinic visits, families felt a lack of support regarding subsequent follow up. Positives included multidisciplinary clinical reviews and access to community support groups.

Conclusion
PACIC may not have been an optimal tool; questions were repetitive and open to interpretation. There were low respondent numbers, however families provided constructive feedback. Use of this data will enable review of current practice and the opportunity to restructure. Partnerships with paediatric consumers along with continued liaison with GV TOPS will ensure ongoing support for local families.

Abstract 53

Title: Prevalence of patients requiring assistance to communicate their health care needs.

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Background:
Effective communication is essential in healthcare. Research suggests people who experience communication difficulties are three times more likely to experience an adverse event in hospital. Communication difficulties are estimated to affect 5-10% of the general population. Older patients with chronic complex medical conditions are at high risk of experiencing communication impairment. A restriction in the ability to communicate with healthcare providers can contribute to inappropriate care, difficulty participating in discharge planning and understanding of written information.
Aim
The aim of this project was to determine the prevalence of hospital patients who experience difficulty communicating their healthcare needs. Human Research Ethics (low and negligible risk) permission was granted for this study.

Method
The Communication Disability Screener (CDS) was administered to 29 inpatients on the rehabilitation Geriatric and Evaluation Unit (GEM) and 48 inpatients on acute medical units. The CDS provided an overall evaluation of an individual’s ability or inability to independently communicate about their healthcare needs in hospital.

Results
Results indicated that 46% (GEM) and 66.6% (acute) of patients were unable to independently communicate their healthcare information. Cognitive communication impairment had the most significant impact on patient’s abilities. The presence of visual and hearing deficits was high; there were also a number of patients with no obvious communication impairment who were unable to independently communicate. Self-perception of communication ability was not a valid measure of successful communication participation.

Conclusion
Results indicated 66.6% (acute) and 48% (subacute) of patients were unable to independently communicate about healthcare. Vulnerability to communication breakdown could be attributed to identifiable co-morbidities, and factors including cultural background, language proficiency, transient medical issues and psychological state.

Our research highlighted the need to address a range of specific and universal factors that influence communication success in our healthcare setting.

All healthcare workers have a role to support patients to participate optimally in healthcare conversations. Staff training and resources to support the development of communication accessible and health literate practices are a priority. Consumer engagement to identify and implement strategies and resources that support the health literacy and communication success of patients and their families is also highlighted.

Abstract 54
Title: Speech Pathology Referrals Project
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Background
Speech Pathologists can make a significant difference to patients with swallowing and communication difficulties and have a positive impact on patient wellbeing, safety, nutrition and hydration. However, not all patients who could benefit from accessing a Speech Pathologist at GV Health were referred between July 2014 and March 2015. Approximately 30% of patients admitted with stroke, dysphagia (swallowing impairment) and communication impairment were not having access to Speech Pathology services. There was a gap in knowledge of when and how to refer to Speech Pathology among doctors and nurses. Under-referral of stroke patients was identified.

Objectives
To increase the number of appropriate inpatient referrals to Speech Pathology, particularly for stroke, communication impairment and swallowing impairment.

To create a transparent Speech Pathology referral pathway for stroke.

Methods
A range of interventions were implemented throughout GV Health to raise the profile of Speech Pathology and improve staff knowledge of red flags for referral. Interventions included the development of an educational four-minute Speech Pathology Referrals cartoon [https://www.youtube.com/watch?v=c5ftYu9H-jw] shown to almost 300 staff at GV Health, and the addition of Speech Pathology to the Stroke Call page from the Emergency Department. Flyers and a screensaver on the intranet were also implemented.

Results
On average, there was a 20% increase in referrals to Speech Pathology for patients with conditions which would likely benefit from Speech Pathology involvement and who would previously not have received a referral. These conditions included stroke, dysphagia, communication impairment, aspiration pneumonia and COPD. There was also an increase in the total number of referrals to Speech Pathology, with 16 more admitted patients per month having access to Speech Pathology who needed it.

Following staff education, nurses and doctors increased their knowledge of red flags for referral and the risks associated with patient symptoms. For instance, 30% (n=69) more staff would refer to Speech Pathology if a patient was not alert or fully conscious, or was short of breath, as they recognized these symptoms were linked with swallowing problems. Twenty-four percent (n=69) more staff would refer to Speech Pathology if a patient was having difficulty following instructions, as it may suggest a communication impairment.

Additionally, process mapping revealed a more transparent and streamlined referral pathway to Speech Pathology, particularly due to the Stroke Call bypassing steps in the process, and the elimination of paper based referrals.
Conclusions
There was a significant increase in appropriate inpatient referrals to Speech Pathology, meaning that 16 more patients per month have the opportunity to access a service that they need. It is anticipated that up to 200 more admitted patients will have access to Speech Pathology over a 12 month period compared with the previous year. Additionally, the implementation of a time efficient and innovative cartoon format appeared to be an effective method of raising awareness and educating staff.

Abstract 55
Title: Hyperhomocysteinemia: More than an indicator of vascular disease? A case study exploring the potential role in secondary intention wound healing.

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Background
Much of the research into homocysteine (Hcy) has explored its impacts on cardiovascular health. Despite large scale trials, reducing Hcy has not been proven to significantly reduce the risk of acute cardiovascular events. However, the role it plays at a molecular level is well understood. Pathological processes in Hcy mediated atherosclerosis relate closely to those required for secondary intention wound healing. Hcy is an independent risk factor for impaired healing.

Methods
This case involved a 71 year old woman ‘Rose’ with a two year history of chronic mixed arterio-venous ulcerations on both lower legs. She has a background of uncontrolled Rheumatoid Arthritis for 15 years, hypertension, peripheral vascular disease and left ankle fusion. Surgical wound dehiscence resulted from the ankle fusion in 2013. Rose was first referred to GVH podiatry in September 2014. Multidisciplinary best practice wound care needs were addressed including dietary advice, improved chronic disease management and revascularisation surgery in 2014. The patient provided signed consent for publication of her case.

Results
The relevance of this case and Hcy is focused on the underlying rheumatoid disease and methotrexate (MTX) use. MTX is well understood to increase serum Hcy, due to its function impacting upon folic acid. Rose resumed 10mg MTX therapy in early December 2014. In a three week period following resumption of MTX, two primary chronic leg wounds showed improvements of 37% and 21% reduced surface area. In January 2015 folic acid supplementation was replaced with an increased, broader B group multivitamin. Healing increased to 52% in each wound over the same three week period. Wound care methods and compression remained identical during each monitored period. MTX levels were doubled to 20mg shortly following the period of increased healing. This resulted in a 7% increase in serum Hcy to 20.5mmol and subsequently slowed healing rates.

Conclusions
Despite a multitude of factors at play in this case, such as the anti-inflammatory benefits of MTX, elevated serum Hcy levels in this case are believed to be a negative factor on healing. The intervention period of increased B group multivitamin therapy with no other change in clinical treatment positively impacted upon healing.

Abstract 56
Title: Physiological transition at birth: neonatal blood volume

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Research project
Explore variations in management of third stage of labour in Australian midwifery practice

Background
Post-partum haemorrhage (PPH) is a leading cause of maternal mortality and an increase in incidence of PPH in high income countries has been reported. The prevention and management of PPH is a key quality and safety issue in healthcare.

There are two distinct approaches to managing the third stage of labour in clinical practice, active versus physiological (expectant) management. While active management is standard in many countries, variations exist and a ‘mixed management’ approach has been identified. Mixed management incorporates components of both active and physiological management.

Mixed management may present increased risk of PPH. Intervening in physiological placental delivery with components of active management is associated with increased maternal blood loss.

Objectives
To describe mixed management of third stage of labour and compare variations in management on primary PPH
To explore factors influencing midwives clinical decision-making in third stage management
To describe current practice of the third stage management in Australian midwifery practice

Design
Descriptive study, mixed method
Future research
Umbilical cord clamping and infant physiology

Background
The timing of umbilical cord clamping has a profound effect on neonatal blood volume at birth. Term infants with pre-birth or immediate cord clamping have significantly lower blood, red cell and plasma volumes than assumed neonatal blood volumes.

Nearly all textbook descriptions of transition at birth state or imply that physiological change is dependent on umbilical cord clamping. Cardiopulmonary adaptation is often described as immediate loss of placental circulation after cord clamping, which is a distortion of actual physiology.

Objectives
• To evaluate the impact of umbilical cord clamping on knowledge, practice and human physiology
• To evaluate assessment of neonatal blood loss at birth
• To compare variations in third stage management on neonatal blood loss
• To develop guidelines for management of nuchal cord at birth
• To appraise the ethics of non-physiological cord clamping and cord blood collection in research and practice

Abstract 57
Title: Rates and predictors of non-attendance at the Goulburn Valley Health Paediatric Outpatient Service for 2014

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Background
Outpatient non-attendance is a concern for many health care providers that requires further attention. Reducing non-attendance can improve resource utilization, outpatient care and consumer satisfaction

Methods
A retrospective medical record audit was undertaken of non-attendance rates, demographic and clinical characteristics of non-attendees during 2014. In addition, a four weeks follow up telephone survey of the primary family contact person of the child for reasons for non-attendance was also undertaken. Qualitative data was collected by asking the paediatric outpatient team their perspective regarding patient non-attendance. A simple intervention of calling the family a day before the child’s scheduled appointment in attempt to reduce non-attendance rate was tested.

Results
A total of 554 (13.9%) children failed to attend their booked appointments and 1123 (28.1%) of scheduled appointment were cancelled for unknown reason. The reasons for non-attendance could not be determined by medical record documentation in 87.9%. The highest non-attendance rate was for the Consultant Behavioral and Development Clinic and the lowest in the multidisciplinary Diabetes Clinic. There was very limited correspondence with the family doctor after non-attendance episode. Overall there was significant difference in non-attendance rates for Aboriginal/Torres Strait Islander (TSI) population in comparison of Non-Aboriginal (25.1% versus 12.9%). Interestingly, although language spoken at home was thought to be a contributory factor for non-attendance, this study failed to confirm this as a significant factor. A telephone call reminder one day before the appointment did not have a significant effect on the attendance rate (14.1% versus 13.5%)

Conclusions
The highest rate of non-attendance was in consultant behavioural/ development clinic and the lowest was in diabetic clinic. It was also observed that there were a high proportion of recurring missed appointments in some children. There was higher non-attendance rate in the Aboriginal and Torres Islander group. The addition to already established reminder systems in the hospital of a telephone reminder call to the family a day before the appointment had no significant effect on patient attendance.

Abstract 58
Title: Outcomes of a unique residential rehabilitation program from rural Australia

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Background
Specialist Residential Rehabilitation Program (SRRP) is the only such program in Victoria, and possibly in Australia, established with partnership between Goulburn Valley Area Mental Health Services (GVAMHS), a rural area mental health service and Mental Illness (MI) Fellowship, a major mental health community support service in Victoria.
Abstract 59

Title: Frequency of venous thromboembolism and its association to Khorana risk score in patients receiving chemotherapy in Goulburn Valley Health

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Background:
Venous thromboembolism (VTE) is more prevalent in patients with cancer than general population. Overall risk of VTE in the setting of malignancy is 4 to 8%, however it can be as high as 20% in some high risk cancer populations (gastric, pancreatic and lung cancer). Thrombosis is the second most common cause of death in cancer patients and potentially can be reduced by about 50% with prophylactic anticoagulation, but there are side effects such as increased risk of bleeding, and cost associated with this strategy. It is important to risk-stratify such patients to target the high-risk groups who are likely to get the most benefit with least harm.

Methods:
Retrospective audit of oncology patients at Goulburn Valley Health who received chemotherapy between June 2015 and May 2016 and were diagnosed with VTE (deep venous thrombosis (DVT) and/or pulmonary embolism (PE)). Patients were identified using the oncology and pharmacy databases. Electronic and hardcopy of clinical records of eligible patients were assessed for demographic and clinical variables needed to apply the Khorana predictive risk model for chemotherapy-associated VTE.

Results:
A total of 329 patients received chemotherapy in the studied 12-month period. 30 patients (9.1%) were identified as diagnosed with VTE. The median age was 65 years old [41–81 years old], 17 patients (57%) were male and 13 (43%) were female. The type of cancer most commonly associated to VTE was colorectal with 13 patients (43%), followed by breast 5 patients (16%) and lung 5 patients (16%). 26 patients (86%) were ECOG 0 or 1. PE was diagnosed in 18 patients (60%) and high Khorana score (3 or 4) was only identified in 3 patients (10%).

Conclusion:
The frequency of VTE of patients receiving chemotherapy in the regional setting is in keeping with international literature. The types of cancer most common associated with VTE were colon, breast and lung, however this is most likely related its frequent presentation rather than its biology. There was not an association of high Khorana scores (3-4) with risk of VTE.

Abstract 60

Title: Nation Bowel Screen Colonoscopy Project Goulburn Valley Health

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Objectives
To assess the characteristics and outcomes of participants attending residential rehabilitation at SRRP over more than a decade.

Methods
We did retrospective analysis of routinely collected data by GVAMHS and MI Fellowship. We collected data from state-wide database of patients in mental health in Victoria, Camberwell Assessment of Needs and Individual Participant Plan (IPP). We assessed all participants’ stays, which lasted ≥ 90 days at SRRP from May, 2011 to December, 2013. This research study received approval from GV Health Human Research and Ethics Committee.

Findings
Total number of participants stays, which lasted ≥ 90 days were 103. Mean (SD) age of patients was 34.2 (10.1) years. Majority were males (65%), had diagnosis of schizophrenia (78%). The median duration of SRRP admission was 275 days. Participants had significant reduction both in the number of inpatient admissions during and 2 years after SRRP admission, as compared to 2 years before SRRP admission (One way ANOVA: 3.23 vs 0.97 vs 4.77; p<0.001; η²=0.23) and duration of inpatient admissions in days (One way ANOVA: 94.9 vs 27.0 vs 39.1; p<0.001; η²=0.31). The average (SD) number of goals stated at SRRP entry were 9.8 (3.0) and those goals that were completed at SRRP exit were 8.5 (3.8). Total 28 different goals were reported by participants during their stay. The completion rate for their goals was 90%, 69%, 65%, and 57% respectively.

Conclusions
A partnership model of psychiatric rehabilitation is effective in reducing number and duration of inpatient admissions for people with severe mental illnesses. Majority of participants achieved their individual goals at the time of exit from SRRP. We believe that the marriage of two perspectives – the clinical and the social and community welfare, is central to the success of this program leading to genuinely recovery oriented perspective.
Background
April 2015, GV Health service redesign to improve the capacity, sustainability and quality of colonoscopy services to support Nation Bowel Screen Program (NBCSP) participants.

Goal
Direct referral pathways for patients to facilitate a colonoscopy procedure within 30 days of GV Health receiving a referral as per agreement with Department of Health and Human Services

Measure/Gap
It was identified in the initial phases of the project that GV Health currently did not have robust enough referral systems for General Practitioners to refer patients directly to Elective Admissions for a colonoscopy. An alternative direct referral model was thus investigated to reduce the average 93 day interval for a NBCSP participant colonoscopy procedure at GV Health.

Intervention
Rapid Access Endoscopy – Nurse Led Clinic’ commenced at GV Health Specialist Consulting Suite in February 2016 for Specialist Consulting Suite referrals only. This clinic is supported, by the concurrent Surgical Clinic. All NBCSP participant referrals to Specialist Consulting Suite and other asymptomatic positive faecal occult blood test (FOBT) referrals in the NBCSP age cohort are managed at this clinic. The objective of this clinic is to co-ordinate/facilitate patient care to allow immediate booking to a colonoscopy procedure.

Detailed ‘Standard Work Procedures’ utilising ‘PROMPT documents’ have been developed to raise and ensure quality of care and improve utilisation of labour and resources. This also ensures that the Rapid Access Endoscopy – Nurse Led Clinic is a ‘systems model’ and not person dependent.

Abstract 61
Title: WHO GETS WHAT? An audit of investigations undertaken by Paediatricians in diagnosis statement of Autism Spectrum Disorder and Attention Deficit Hyperactivity Disorder

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Objective
There is a variation amongst Paediatricians in the manner and extent to which children with potential Autism (ASD) or Attention Deficit Hyperactivity Disorder (ADHD) are investigated. This audit was undertaken to gauge to range of investigations used by a group of Paediatricians and the utilities of the results.

Method
We conducted retrospective analysis of medical records in a Paediatric clinic in Shepparton during the period of 1st January 2014 to 31 December 2015.

Results
There were 171 patients with ASD only, 156 ADHD only and 83 patients with ASD and ADHD.

Haematological / biochemical investigations were mainly done in ASD or ASD with ADHD patients (up to 62%) while ADHD only group had up to 52%. Full blood counts have not shown significant abnormalities in any of them. Iron studies have shown significant changes up to 17% in ASD group and 20% in ADHD group. Vitamin B12 or Folate levels were only abnormal in 1 patient. Vitamin D levels were low in 11% ASD group, 15% in ADHD group, 8% in combined group. Thyroid functions were only abnormal in 2 patients. None of them had abnormalities in renal function. Liver function abnormalities are found in 2 of ADHD group and 1 of ASD patients.

Genetic testing is done in 88[51]% of ASD, 41 [26]% of ADHD and 43 [51]% of combined group. Nearly 1/5th has shown genetic abnormalities in ASD group while it was 24% in ADHD group. Majority of ASD patients 203 had input from psychologist in implementing the diagnosis, while 162 (64%) had speech assessments and 174(68%) had Occupational therapists assessments. In diagnosis of ADHD, ASEBA survey or the parent/ teacher form were used in equal proportion by the different Paediatricians. Ritalin was the drug of choice as it is used in 100 patients [43%]. Clonidine and Melatonin was mainly used in ADHD only patients [26%].
Conclusion
There is considerable variation in investigative range and intensity in relation to these behavioural diagnoses. Many tests had ‘low’ to ‘no’ positive yield. Further prospective study may lead to a basis for rationalisation of investigations and public expenditure.

Abstract 62
Title: Care of children with behavioural-developmental disorders – understanding the attitudes, practices and unmet needs of regional primary care practitioners
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Objectives
To evaluate the attitudes and practices of primary care practitioners caring for children with behavioural-developmental problems (BDPs); and the unmet needs that drive referrals to secondary and tertiary paediatric services in a rural Victorian region.

Methods
An online survey involving a sample of practicing primary care practitioners (PCPs) comprising of Maternal Child Health Nurses (MCHNs) and General Practitioners (GPs) was undertaken between 14th of October 2014 and 9th of February 2015.

Results
During the sixteen week study period, 23 eligible PCPs responded comprising of 12 MCHNs (100% response rate) and 11 GPs (11% response rate). Only 11 MCHNs and 9 GPs answered all the questions. Results are expressed as percentages of respondents. Only less than a quarter of the patients seen by 90% GPs were children aged under 18 years in comparison to 66.67% of MCHNs who estimated having more than 75% of their clientele as children. Speech and language delay (52.38%) and infant sleeping problems (28.57%) were the two most common problems referred to specialty services.

Conclusion
This study highlights the need for educating and training GPs in utilisation of behavioural-developmental screening tools and educating PCPs in managing less complex BDPs and provision of clear guidance on when and how to refer children for early intervention services.

Abstract 63
Title: Investigating prevalence of malnutrition in Victorian Cancer Services Phase II– a regional experience.
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Background
Malnutrition in cancer patients is often unrecognised and therefore untreated, with a reported incidence of 40-80 percent among inpatient populations and 26% in chemotherapy daypatients. Malnutrition can increase length of hospital stay, reduce treatment tolerance, slow wound healing, increase complications and contribute to higher mortality rates. Goulburn Valley Health (GVH) dietitians participated in a state-wide Malnutrition in Victorian Cancer Services prevalence study in 2012 (Phase I) and 2014 (phase II). In Phase I GVH malnutrition prevalence was 43 percent; state average 31 percent. In addition, while GVH dietitians were involved in the nutritional care of half the patient cohort, of those with a malnutrition diagnosis, 43 percent had no dietetic referral. This finding suggests malnutrition risk was being missed by the malnutrition screening practices at that time.

Aim
To determine the patient population characteristics and prevalence of malnutrition for admitted and ambulatory chemotherapy day patients.

Methods
The study involved dietitians consenting, screening and assessing malnutrition prevalence in cancer patients over a common data collection period.
Results
Forty-seven patients were recruited to phase II [RR 98%]; the majority (91%) chemotherapy day patients. Average age of participants was 65 years, with equal males and females. Most common tumour streams identified were colorectal and breast (together 57% of cohort). Average Body Mass Index [BMI] was 28.2 kg/m² [RR: 18.8 – 42.0]. The prevalence of malnutrition risk; determined by a score of ≥ 2 on a validated Malnutrition Screening Tool, was 13 percent, of which 8.5 percent were classified as malnourished. All patients in the Phase II cohort had undergone supportive care screening. 100% of patients identified as malnourished through this screening process had an active dietetic referral. Sixty-six percent of the total cohort had had a previous assessment by a dietitian, one third of those within the previous seven days.

Conclusion
Dietitians are the key workforce to lead identification of malnutrition risk, malnutrition assessment and nutritional intervention. Early identification by screening can expedite appropriate nutritional management and improve patient outcomes. Over time malnutrition screening rates have increased and malnutrition prevalence declined. Dietetic interventions are now more targeted to those experiencing significant nutritional decline.

Abstract 64
Title: The Maternal Attribution of Meaning of first recalled Breast Biting by their Infant; An Infant Mental Health Perspective
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Background
Breast feeding can be a unique and positive experience and offers mother and baby opportunities for significant interpersonal and intrapsychic reciprocal interplay. However feeding difficulties are relatively common and reports of babies and infants who bite their mother’s breast are usually described from a healthcare perspective.

Methods
A phenomenological based enquiry approach was used to gather qualitative information by semi-structured interviews from mothers who had experienced their baby or infant biting them during breast feeding. An interpretive paradigm was chosen as an appropriate theoretical worldview perspective to strategically enquire about the meanings mothers make of their baby or infant biting them during feeding. Seven participant mothers were recruited from the local community based Lactation Clinic, the Australian Breastfeeding Association branch and Maternal and Child Health Centres anticipated to comprise a mix of relatively uncomplicated and more difficult breast feeding groups. They were not selected as a comparative sample but purposefully to provide thematically rich descriptive information. Narrative transcripts were evaluated using a Narrative Analysis method. A grounded theory informed inductive approach was used to identify themes which were also systematically compared across the narratives to build up an inclusive matrix of themes and derived contextual categories.

Results
The initial event has early and late phases of meaning. Early attributions remain relatively stable and become coherently integrated with subsequent biting experiences. Meaning of the biting is made through inter-subjectivity. Maternal dissonance and ambivalence influence attribution. Meaning is attributed to the baby’s emerging sense of self. Biting affects the experiential quality of the mother-baby and breast feeding relationship and weaning progression.

Conclusions:
Mothers experienced intense emotional and cognitive responses with a range of meanings attributed to the baby as a result of biting. That an appropriate parent and infant mental health approach can be guided by the mother’s attributions of her baby in the constructed meanings of the baby’s biting. The organizing perspective be around the mother-baby relationship and that the baby’s subjective experience also be considered. Some attention be given to the baby’s object relations functioning in the biting and to consider the baby’s psychic wellbeing.

Abstract 65
A Case Study on Life Threatening Hemorrhage in Preterm Pregnancy with Placenta Praevia and Management Challenges in a Low Neonatal Resourced Regional Hospital 187 km from Tertiary Center.
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Abstract 66

Title: Birthing on Yorta Yorta Country

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Background

As recent as 1970, it was normal practice for local Aboriginal women in the Goulburn Murray Region not to be admitted to the hospital wards, but instead be put out on the verandas of the hospital. The Rumbalara Birthing Program was established in 1992, to address the lack of antenatal visits, and late pregnancy presentation of the women. It established an antenatal clinic for Aboriginal women, particularly those with a high risk pregnancy. Currently it provides high quality holistic ante and post natal care.

Methods

Electronic records describing maternal and perinatal outcomes for all women who received care through the Rumbalara Birthing Program and who birthed at Goulburn Valley Health were retrieved from different sources for years 1992-2014. Information contained in these datasets was evaluated for data integrity and completeness. As a result, the data were restricted to years from 2003 to 2013 inclusive. Following data cleaning and organisation, a dataset was collated that included all live births to mothers who attended the Rumbalara Birthing Clinic in these years. Selected maternal and perinatal characteristics sourced from the electronic data were analysed, using SPSS.

Results

A descriptive analysis reported an empirical base that described maternal information and birth outcomes for Aboriginal mothers and mothers of Aboriginal babies, and Aboriginal babies born on Yorta Yorta country. Encouraging results were found in bio-medical markers such as birthweight and mode of delivery. However, concerning results emerged relating to the social determinant and lifestyle factors that influence outcomes such as smoking and weight issues.

Conclusions

Results from this research have highlighted areas where further research would strengthen the knowledge and enhance policy direction for ensuring best practice maternity and postneonatal care for this particular group of Aboriginal mothers and babies. This research also concluded that quality antenatal care provided through an established Aboriginal-led program is critical in achieving optimal maternal and infant outcomes among the Aboriginal population.