parachute insertion. A significant burden of injury is managed though the RAP.

Actions: Following a review of evidenced based guidelines, we instigated a process of rehabilitation service improvements which can be broadly summarised as follows:

- a. enhanced co-ordination through engagement of all stakeholders, with an emphasis of patient-centredness
- b. early return to work, enhanced vocational rehabilitation and improved rehabilitation "culture"
- c. enhanced program management, including goal setting and data management.

Discussion: In this presentation, we will discuss the key enablers and barriers to the introduction of these service improvements.

Contact author: Dr John Shephard, CM Health, PO Box A986, Sydney South, NSW 1235

The HMAS Kuttabul clinical pilates rehabilitation programme

Dr Anna Lewis

Anna lewis is a physiotherapist at HMAS Kuttabul and a RAAF Specialist Reservist Physiotherapist. She holds postgraduate qualifications in Sports Physiotherapy and recently completed a Doctorate in Clinical Physiotherapy through the University of Melbourne.

With a strong clinical interest in low back pain and rehabilitation, she developed and implemented a Clinical Pilates rehabilitation programme to provide effective treatment programmes for injured Defence personnel. This programme was the subject of doctoral thesis research (2008-09) and will be submitted for publication in a peer reviewed journal in the near future. Through the clinical doctorate, further study was undertaken in musculoskeletal dry needling, exercise for women and publication skills, including a publication in Physical Therapy Reviews in 2008.

Implementation of this programme into other Defence health sites has now commenced and Anna hopes to continue strong professional relationships and sharing of skills between Defence physiotherapists across Australia.

The nature of Australian Defence Force (ADF) work exposes members to workplaces where the challenges faced to perform inherent occupational duties are diverse, plentiful and often unpredictable. Work risk factors for ADF members are amplified by postings and deployments to exigent work environments on warships, planes and foreign land bases. The implications of injury to ADF members extend beyond the pain and

disability of the individual to the broader picture of the operational readiness of the unit to which they belong. A medical downgrade of an individual unable to return to operational work in a fully functional capacity may also impose a negative impact on the unit to which they belong.

The Clinical Pilates Rehabilitation Programme was established in 2003 in recognition of the requirement for effective rehabilitation programmes for ADF members. This need is reinforced through Strategic Objective 5 of the Defence Occupational Health and Safety (OHS) Strategy (2007-12). Despite the popularity of the pilates treatment approach, there is limited research evaluating the efficacy of clinical pilates as a treatment tool, and in particular for the pain and dysfunction associated with chronic low back pain (ClbP). To date, only four clinical trials have been conducted on patients with ClbP with conflicting results.

Research aimed at improving pain and function for ADF members with ClbP is necessary to ensure effective clinical management of this patient population. The HMAS Kuttabul Clinical Pilates rehabilitation programme has undergone evaluation through pilot studies (2004-05) and a feasibility study as part of a doctoral thesis (2008-09). Results from this research showed that clinical pilates is a feasible intervention for patients with ClbP in the ADF. The changes in pain and function were statistically significant on all primary and secondary outcome measures and, most importantly, were clinically meaningful. There were very few adverse effects associated with the programme and excellent compliance was experienced with both treatment attendance and home exercises.

One of the major strengths of this study (and execution of the programme in the clinical setting) lies in the individualised treatments based on the patient's presenting history, signs and symptoms. This enables the most appropriate exercise programme to be designed and progressed. The uniqueness of this programme ensures each patient commences treatment at an appropriate level. Previous studies have not individualised treatments but delivered a standardised generic programme of exercises to a heterogeneous patient population.

Broader ADF application of this programme has commenced with the successful implementation into the physiotherapy department of a WA army base in June 2010. Due to the exceptionally high operational tempo and particularly physically demanding workloads of this unit, the requirement to return to work expediently at full functional capacity, is critical. Within this unit, the programme is providing rehabilitation for wounded soldiers, and is being used as a screening assessment for performance enhancement and injury prevention for members throughout the unit. The broader application

of this programme across Defence is being successfully achieved through the strong working relationship now established between the physiotherapists at these two bases.

Contact author: Dr Anna Lewis, HMAS Kuttabul, BLD 921, Wylde Street, Potts Point, NSW 2011 Email: anna.lewis@defence.gov.au

Understanding the impact of military deployment on families: an Australian study

\*Dr Annabel Mcguire\*\*

Dr Annabel McGuire joined the Centre for Military and Veterans Health (CMVH) in January 2007 as a Research Fellow within the Deployment Health Surveillance Program. She has played a leading role in development of research instruments, analysis of data and writing of major reports for the Defence Deployed Solomon Islands, East Timor and Bougainville health studies. Within these areas Annabel has been particularly responsible for the self-report questionnaire and analysis of the Defence Psychology data. She has also had significant input into the design of the questionnaire for the Middle East Area of Operations Study. Currently, she is the Chief Investigator on the Timor-leste Family Study, a natural progression from the veteran to the family.

The effect of military deployment on the serving member has been extensively researched with most literature linking deployment with poorer health and more symptoms of ill health in veterans relative to comparison groups. Whilst most literature investigating the effects of deployment has highlighted numerous mental and physical implications for veterans, less attention has been directed to investigating these effects on the partners and families of the deployed member. The current research aims to determine what, if any, physical, mental or social health impacts families experienced as a result of deployment. This research presents a qualitative description of the unique strengths, challenges and relationship processes in Australian Defence families. Four indepth focus groups were conducted with partners of Royal Australian Navy, Australian Army and Royal Australian Air Force personnel who were deployed to Timor-leste. Content analysis procedures were used to analyse the data. The findings support aspects of prior research, but also provide new insights by exploring the influence of work family conflict and family dynamics and revealing how these factors impact the ability of families to cope with deployment separation.

In light of the existing literature, conclusions and implications of these findings are addressed.

Contact author: Dr Annabel McGuire, Centre for Military and Veterans' Health, Mayne Medical School, Herston Road, Herston, QLD 4066 Email: a.mcguire@uq.edu.au

## E-Health

How did we get there and where are we going Colonel Graham Durant-Law

Colonel Graham Durant-Law joined the ADF in 1977. In 2000 he was seconded to command the hospital element in Bougainville. On returning he retired from the regular Army but continued to work in a Reserve capacity.

In 2008 Colonel Durant-law commenced fulltime service once again, and was posted to Headquarters Joint Health Command. He has had two concurrent roles; the first as the Chief of Staff, and the second more important role leading the strategic change reform agenda. In the later role he initiated and is responsible for the development and acquisition of an eHealth system, colloquially know as JeHDI (Joint eHealth Data and Information system).

- Elements of the Army, Air Force and Navy, as well as contracted individuals and organisations provide Health care delivery within the Australian Defence Force (ADF).
- To provide effective health care, it is a requirement that an individual's medical information is available

irrespective of location in a timely and efficient manner.

- Recent reviews and studies commissioned by the ADF have found the ability to manage health data is unsophisticated and immature.
- A review of the existing systems identified distinct capability gaps in these systems including:
- an inability to universally meet Defence clinical user needs or management requirements;
- they are below clinical contemporary Australian practice;
- the systems are unable to provide aggregated governance data, such as the cost of fee for services delivery or after hours care.

Contact author: COL Graham Durant-Law, DLC, PO Box 3076, Manuaka, ACT 2603 Email: graham@durantlaw.info