

## RESEARCH THEME WORKING GROUPS SUMMARIES

<p>9:00- 12:00 9h00-12h00</p>	<p><b>WORKING GROUP 1</b> Virtual reality for military rehabilitation: keeping up with realistic expectations Report filed by: Bradford McFadyen</p>
<p>9:00- 12:00 9h00-12h00</p>	<p><b>WORKING GROUP 2</b> Evidence-based Treatment for Military-related PTSD: For whom, how and when do we modify treatment protocols? What are the benefits of group treatment over individual therapy? Report filed by: Maya Roth</p>
<p>9:00- 12:00 9h00-12h00</p>	<p><b>WORKING GROUP 3</b> Family Health: Risk and resilience in military families Report filed by: Sanela Dursun</p>
<p>9:00- 12:00 9h00-12h00</p>	<p><b>WORKING GROUP 4</b> Clinical research 101: A primer for health care professionals Report filed by: Eric Robitaille and Luc J. Hébert</p>
<p>9:00- 12:00 9h00-12h00</p>	<p><b>WORKING GROUP 5</b> Veteran Research Datasets Report filed by: Linda VanTil</p>
<p>9:00- 12:00 9h00-12h00</p>	<p><b>WORKING GROUP 6</b> Investigational opportunities as applied to public health concerns in the CAF Report filed by: LCol Andrew Currie</p>

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# Virtual reality for military rehabilitation: keeping up with realistic expectations

Submitted by Brad McFadyen, Laval University

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## CONTEXT, BACKGROUND:

Virtual reality (VR) is a promising technology to allow context specific, patient oriented interventions and assessments across different populations for both cognitive and physical rehabilitation. VR provides the ability to standardize and control person-environment factors, and to motivate patients and enhance enjoyment of rehabilitation. However, it can be cost prohibitive, technically complex and not always user-friendly. Research is needed to develop clinical protocols, outcome variables and dosage for given clinical goals. At the same time, researchers and clinicians need to keep abreast and exploit the quickly evolving technology to render VR more accessible and effective in the clinic.

The CAF installed CAREN systems at The Ottawa Hospital and the Glenrose Rehabilitation Hospital. The only other university-based site with similar technology and connections to the CAF is at the CIRRIIS in Quebec City. Other VR sites do exist, however, within the CIMVHR university partners as well as the DND (e.g., DRDC). The CAREN-based sites have participated in annual discussions for some time (at times including other NATO based sites using similar systems). This WG was open to researchers, professionals and clinicians, in order to move discussions forward and more pointedly address the objectives listed below.

## OBJECTIVES:

The objectives were to better understand VR rehabilitation with respect to:

- The myths and realities of where we are presently for military rehabilitation; and
- How we can better exploit and evolve with VR's changing technology to improve research and knowledge transfer.

Perspectives on these objectives were presented by 4 sites (CIRRIIS, TOH, CFHS and the Glenrose Hospital) and attendees were asked to consider: the added value of VR to current rehabilitation practice; if readily available, which VR-Based systems they would use, what they would do with them and what populations they would prioritize; and how we should work together to move forward.

## RELEVANCE:

The WG had at its heart, enhancing the use of VR technology for better evidence-informed practice. It attracted 20 attendees including administrators, clinicians, technical experts and researchers. The CAF and DRDC as well as different universities and clinics (and even NATO members outside of Canada) were represented. Thus, the WG certainly met the CIMVHR goal of engaging academic research resources and acting as a conduit between the academic community, government organizations and similar international organizations.

## SUMMARY OF DISCUSSIONS AND CONCLUSIONS:

After presentations, discussions were carried out in small and large groups. First, it was recognized that there is definitely a "WOW" factor with VR, but it was noted that we need to look at it as another clinical tool, albeit innovative, to add to or augment present mental and physical rehabilitation. VR's clinical (and research) use needs to be decided by clinicians/researchers and not industry. That is, a "one-size- fits-all" approach to VR development for rehabilitation should be avoided. There was a specific call to stop looking for ways to justify the use of installed systems and to move more towards better exploiting these

installations in ways that push present and future clinical goals (i.e. to identify key clinical challenges that cannot (easily or at all) be addressed by traditional rehabilitation approaches).

Clinicians still appear to need to be convinced of VR's potential, both in general and with respect to the systems already in place. VR systems need to be seen with respect to what they can (and cannot) offer in relation to traditional approaches. Its potential (evolutionary factor) also needs to be better understood. It was felt that the present VR teams could be more proactive in educating potential users. Advantages of VR discussed at the WG were its ability to: increase motivation and compliance; be more flexible and context specific in environments (different scenes); provide easier set up of desired environments for assessment/training than with real physical set-ups; apply across different populations; exploit sensory conflicts; not only speak to return to function, but also its ability to further train and enhance function. Limits or challenges that were discussed included: cost, time required, access, user friendliness.

Research projects and clinical applications require better communication and collaboration between and within sites. In particular, it was discussed that there is a need to consider sharing and pooling resources (expertise, infrastructure, scenes, etc.) across the CAF and other sites.

VR technology is rapidly evolving, but it was clear that most in the WG are not aware of the potential and how we can or should evolve with the technology. Part of this may be the present focus on the CAREN technology. However, there were some points raised related to new directions in VR in general (we did not have time to go into details):

- Need for systems that are somewhat “turn-key/easy to apply” while also providing some versatility and flexibility to allow patient orientation (such flexibility specifically necessary for research).
- Use to enhance Telerehabilitation to create a group/team environment despite the geographic separation.
- Coordination with other technology in different innovative ways (e.g., brain imaging/stimulation, physiological monitoring, robotics).

In conclusion, while better exploiting present installations, we should not be constrained to them and must evolve with the technology. We need to better understand what exists and what is being done in VR across CAF, DRDC and university partner sites. We should move towards better communication and collaboration across sites. Finally, it was noted that it is now time for action.

#### **THE WAY AHEAD:**

In relation to the concluding summary above, specific suggested actions were to:

- educate clinicians about the use and potential of VR for mental and physical rehab;
- create a registry of who does what and with what (systems, data bases, scenes, expertise) across

VR sites;

- establish “virtual” (Web based) rounds to discuss complex cases and how VR may help;
- consider (at least for CAF members at non-VR equipped bases) opening access to the larger, installed systems (e.g., CAREN) continuing afterward with traditional rehab or maybe even smaller VR options (e.g., Ottawa-Valcartier or even CIRRIIS-Valcartier);
- increase collaboration across CAF and partner sites in order to develop protocols/variables/dosage, proofs of concept, and show transfer of VR to the real world.

These are certainly not exhaustive and we ran out of time to provide other actions. Also, the details of how to carry out these (or any other) actions and who will take responsibility were not specifically

discussed, and need to be established. Certainly, the “CAREN coordinator” would probably have a major role in moving things forward (and this has become evident in the days since the meeting).

#### **KT PLAN:**

Potential KT impact is at the level of researchers, clinicians, CFHS and potentially industry. Researchers not only will provide evidence, but also be guided by clinical needs. Clinicians are the group most in need of evidence and education. VR research will allow the CFHS to better set policy related to the use of virtual rehabilitation. Knowledge exchange with industry is needed to better align technology to clinical goals. Suggested actions above will ensure knowledge mobilization. The CAREN coordinator has a definite role to play in helping to ensure knowledge transfer.

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## Evidence-based Treatment for Military-related PTSD: For whom, how and when do we modify treatment protocols? What are the benefits of group treatment over individual therapy?

Submitted by: Maya Roth, St. Joseph’s Health Care, London

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#### **CONTEXT, BACKGROUND**

Over the past decade, the research literature examining the efficacy and effectiveness of evidence-based treatment for military-related Posttraumatic Stress Disorder (PTSD) has grown exponentially. Prolonged Exposure Therapy (PE), Cognitive Processing Therapy (CPT), and Eye-Movement Desensitization and Reprocessing (EMDR) have been identified as first-line interventions, address comorbid diagnoses (i.e., Depression, Anxiety, Alcohol Use Disorders), and improve psychosocial functioning and quality of life. Yet, these interventions are not implemented by many clinicians, with data suggesting an uptake of ten percent of participants of PTSD treatment workshops. Furthermore, there is emerging clinical awareness that these treatments may not be universally effective when implemented by protocol without the use of a client-centered approach. To date, research and clinical practice in this area have not identified patients who may not benefit from these treatments, or modifications to treatment protocols that may facilitate engagement and outcome for certain patient profiles. Emerging research and clinical principles suggest that the integration of Outcome measurement, paired with timely in-session discussion, and individualized functional goals into treatment protocols may enhance treatment outcome. Finally, group based application of PTSD treatments requires further research in order to evaluate whether their efficacy and effectiveness is enhanced through the group treatment milieu.

#### **OBJECTIVES**

This working group was open to researchers, professionals and clinicians (both experts and those with limited PE, CPT or EMDR experience) with the overall objective of enhancing the application and outcome of evidence-based treatment of military-related PTSD with respect to the following goals: 1) Increasing knowledge of the empirical support, implementation, and practical considerations of PE and CPT, primarily; 2) the importance of transparent Outcome measurement; 3) the benefit of incorporating individualized functional goals into protocolized treatment; and 4) the group therapy application of these treatments. These objectives have inherent implications for research, knowledge translation, and clinical practice.

## RELEVANCE

The mission of CIMVHR is “to enhance the lives of Canadian military personnel, Veterans and their families by harnessing the national capacity for research.” The working group certainly aligned with this mission, and facilitated the collaboration of clinicians and researchers on the presentation panel who came together with a goal of enhancing and extending the available care to Canadian military personnel and veterans, and by extension to their families. The second half of the working group harnessed the collective experience and reflections of the audience in identifying tangible areas for future research, improvement of clinical practice, and ongoing collaboration.

## SUMMARY OF DISCUSSIONS, AND CONCLUSIONS

The overarching consensus among the working group presenters and participants was that

- We need to collaborate to enhance the mental health care that our veterans and military personnel receive;
- Evidence-based treatments are effective, under-used, and need to be tailored to the individual patient; and
- That Outcome measurement, integration of functional goals, and further examination of the efficacy of group treatment is warranted. The working group was divided into three smaller groups, focusing on further discussion of Outcome measurement, functional goals and group treatment, respectively.

Summaries of these focal discussions are included below:

**Outcome measurement:** Agreement was reached that session-by-session outcome measurement makes an independent contribution to PTSD treatment outcome, when implemented in a patient-informed and centered way. Participants underscored the importance of using complementary measurement strategies (i.e. self-report, functional goal attainment), and the need for continuous measurement of pertinent domains (PTSD symptoms, overall symptom distress, satisfaction with social and occupational functioning).

Participants identified the need for collaboration between VAC and the CF to ensure continuity of outcome measurement for transitioning members to enhance client-centered care. A number of important issues were raised that warrant future empirical investigation, especially given multiple reports of problematic drop-out rates and limited outcomes associated with current interventions:

- The importance of evaluating treatment fidelity in the context of patient outcome measurement. How can outcome measurement be used to help clinicians maintain treatment fidelity while being patient-centered?
- The relative contribution of technical skills and therapy relationship skills evidence-based PTSD treatment outcome.
- How can outcome measurement be used to keep treatment planning and session content ‘client-centric’ throughout the course of treatment? Specifically, how should outcome measurement be used to inform clinicians to change direction in treatment in response to shifting client circumstances, needs and capacities? Finally, it was recommended that continuous outcome measurement in the context of program evaluation could facilitate ongoing research with external validity and real-life applicability, especially in the context of emerging treatment and technological advances (i.e. virtual reality).

**Functional goals:** Consensus was reached that functional goals need to be individualized, initially qualitative in nature, integrated into evidence-based practice protocols, and given equal footing with symptom remission from a treatment framework perspective. It was further recommended that

clinicians be encouraged to normalize their patients' loss of functioning (i.e., cognitive, social, occupational), in order to establish realistic goals for functional improvement rather than reinforcing the sense of failure that mental health diagnoses, military release, and reintegration into civilian life can foster. It was also suggested that systematically evaluating changes in cognitive functioning will have implications on treatment outcome and functional goal development. Participants encouraged clinicians to assess the benefit of cognitive remediation, when necessary. Another recommendation pertained to the importance of assessing patients' need for emotional skills and regulation training as a precursor or adjuvant to evidence-based treatment. Two avenues for future research and clinical discussion were identified: 1) the necessity for developing a tool to evaluate treatment readiness specific for this population; and 2) a mechanism for quantifying which evidence-based treatment and focused functional goals would lead to the best outcome for an individual patient.

**Group Therapy:** Participants agreed that there is merit to further research and clinical discussion about the group application of evidence-based treatments for PTSD. A number of important questions were raised that warrant future empirical investigation:

- Is the group application of evidence-based treatment for PTSD more effective than the individual therapy equivalents in military and veteran samples?
- Do participants of group therapy with individual therapy augmentation have a better outcome than participants of group treatment alone?
- Is it possible to ascertain whether group treatment outcome is a function of the intervention or the benefits of the group milieu?
- What are the mechanisms to determine readiness or appropriateness for group therapy versus individual therapy?

#### **THE WAY AHEAD**

The next meeting is scheduled for January 11, 2016 at the Parkwood Operational Stress Injury – GTA Services site. This meeting will bring together CF and DRDC researchers, as well as clinicians and researchers from across Southwestern Ontario to further develop a collaborative plan, in part to enhance the treatment provided to our military personnel and veterans. As the working group host, I intend to continue to move the collaborative discussion forward by disseminating the findings to the presentation panel, and to the attendees. As a clinic, we are also interested in integrating some of the findings into our practice.

#### **KT PLAN**

It is our intention that the outcome of this working group (research collaboration, enhanced clinical practice, and collaboration between organizations), will impact the quality of the care that is provided to our military personnel, veterans, and by extension their families' quality of lives. The importance of ensuring that our patients receive first-line treatments for their military-related PTSD is an ongoing discussion between the CF and VAC. The outcome of this working group will be shared with these organizations in an effort to highlight the strengths and possible enhancements to evidence-based treatment. These organizations have committed to integrating timely and patient-centered Outcome measurement into their treatment, and the research collaboration emanating from this working group will serve to reinforce the importance of this strategy. It is anticipated that ongoing empirical evidence to support the individualized integration of functional goals into protocolized treatment and the group application of these treatments will inform clinical practice, and programming expectations within the CF and VAC. In regard to the appropriate dissemination of this working group's collaborative discussion, I am hoping to submit a Talking Point article to JMVFH. The ongoing research and clinical collaboration will result in dissemination at future academic conferences and journal publications.

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# Family Health: Risk and resilience in military families

Submitted by: Sanela Dursun, Defence Research and Development Canada

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## OBJECTIVES

This Research Themed Working Group (RTWG) aimed to describe the current state of evidence on issues related to military families and identify the areas in greatest need of attention. Four structured breakout group discussions focused on:

1. Marital and family functioning;
2. Families of ill/injured
3. Parenting and Child Outcomes; and
4. Unique challenges of Veteran families.

The RTWG included CAF service providers, CAF policy/program directors, academics (MSVU, Queens, Calgary), DND/CAF researchers and researchers from UK and US. This combination of professionals with various perspectives led to a passionate and productive discussion.

Each group discussed the most recent findings, identified new research priorities, and how findings could be translated into evidence-based practices, policies and programs. Regarding gaps in knowledge and unresolved issues, several points were highlighted and many could be translated into research questions, policy, or programs/initiatives.

## 1. MARITAL AND FAMILY FUNCTIONING BREAKOUT SESSION

### Gaps/Needs/Issues

- What is Currently Happening:** More information needs to be made available on what is currently happening in the family/marital research domain (e.g., a central database or place where everyone can go to see the work being done)
- Disseminate the Good News:** Acknowledge and pass along the good news – the “what is working” (e.g., protective factors such as social support, MFRCs)
- Knowledge Integration:** Exert a greater push toward knowledge integration, more collaboration with academia, other government departments and industry partners
- Research Translating into Action:** Often times, you never really see how the research informs policy, programs, change etc. This is important because it will encourage more people to contribute to future research and help validate the work being done (e.g., not just *another* survey)
- Intimate Partner Violence (IPV):** Establish protocols. As with most concepts (e.g., family, resilience), there is no clear cut definition that everyone doing research in this domain is using; there is also no clear cut way to measure IPV to determine accurate incident rates
- Methodological Limitations and Challenges exist:** for instance, if researchers are only accessing participants through MFRCs or social media groups to get their samples, aren't we excluding other groups who might not be using MFRCs or those that are not on social media?

- Marital Relationships Across the Deployment Cycle:** some types of deployments allow for lots of communication between the deployed member and their families and the ability to use the techniques and tips offered in many briefings, modules etc. However, for some deployments, for safety reasons, family members don't even know where the deployed person is and are not able to communicate with them regularly – the unique traits of different types of deployments needs to be recognized; more longitudinal research across the deployment cycle is also needed
- Population Data:** Improve accuracy of the population data available at an organizational level (CAF/DND)
- Parents of Military Personnel:** research is needed regarding parents who want to support their adult children who are military personnel when they are deployed and after they return home

Questions posed by the group:

- Are there differences for children when their father is deployed versus when their mother is deployed?
- What are the unique needs of families with children who have special needs? (also the definition of special needs is unclear)
- Are families trained/educated in conflict resolution doing better than families not trained or educated in this area? What are the long term impacts?
- In military children/adolescents, is the prevalence of substance abuse or mental health issues different from children/adolescents in civilian families?
- Are their differences in families dealing with an OSI versus families not dealing with an OSI?
- Are their differences in families living in large city/metropolitan areas versus families living in rural or isolated areas?
- What impact do programs have on children who are dealing with a parent with an OSI? It is critical that we follow up with people who participate in programs/training to determine if it has worked and/or it was effective (e.g., learned techniques were used). Currently, program evaluations are often completed immediately following a program/training and this is too soon.

#### PROGRAM DIRECTION AND POLICY ISSUES THAT CAN HELP US MOVE FORWARD

- Community Engagement:** Increased collaboration needed
- Increase Awareness** as well as education on program details and accessibility
- Consistency** in programs/information packages across jurisdictions (e.g., follow a child at each school board) need to be developed at a national level
- Developmentally appropriate:** everything produced (programs/information packages) needs to be at a developmentally appropriate for children as well as for spouses. Some spouses may have a high school level education; some may have PhDs. It needs to be applicable for everyone
- Virtual Classrooms:** working through modules and training from home is great but it is critical that the social support systems are also still available (e.g., telephone counselling, web chats, discussion boards)

Policy

- Governance models need to be examined
- The scope of eligible “service providers” needs to be broadened– for instance, right now only social workers are considered eligible. This could be expanded to include family life counsellors, psychotherapists etc.



- The DAOD on family violence is outdated and needs to be revisited.

## 2. FAMILIES OF ILL AND INJURED MILITARY MEMBERS BREAKOUT GROUP

### Gaps/Needs/Issues

- Service providers mentioned that many families of ill and injured military members, transitioning from military to civilian life for health reasons, are struggling or anxious with regards to finances. There is a waiting period between receiving compensation from VAC and this financial gap can be dramatic for some families. Hence, a better understanding of the financial pressure generated by the transition process would help targeting families at-risk of financial problems. An accurate financial snapshot of transitioning families would be a first exploratory step to respond to this objective.
- Furthermore, service providers discussed the often less than ideal timing to receive programs or services and even completing paperwork. For instance, some CAF members are too debilitated by their physical or mental injury/illness that they do not complete the necessary paperwork on time generating delays in services and administrative work. Also, some ill or injured CAF members receiving programs/services are not necessarily ready, leading to ineffective results. Therefore, providing guidelines to case managers for identifying the “right” timing to provide services would be helpful.
- We also discussed the utilization of technology as a tool to aid with different health problems, for example to monitor medication use, to provide peer support, and to provide services in remote locations.
- Service providers also mentioned that programs are not always relevant or effective for the ill and injured CAF members. We discussed the importance of properly evaluating implementation, relevancy, and performance of pilot projects before programs are being launched nationally.
- A very important point was made regarding CAF members’ reluctance to disclose information regarding their injury or illness to their family. Service providers mentioned the existence of a hierarchy of injuries/illnesses where being physically injured is on top and being mentally ill is at the very bottom. This mirrors barriers of perceived stigma, shame, and relying on self-management to get better which refrain some CAF members to seek help for mental health problems. This lack of communication between spouses undermines family social support and prevents family members from understanding the illness and receiving services. Indeed, because of professional confidentiality, it is not possible to disclose information on military members without their consent. An avenue to counter this issue would be to provide education and awareness sessions on mental health problems and services to all family members.
- We also discussed the need for family members to increase their preparedness before being included as a caregiver. Family members would benefit from specific training on the injury/illness and needs of the wounded CAF member, as well as self-care.
- In terms of the transition from military to civilian life and the impact on family members, service providers identified some information needs. For instance, the family can face difficulties to access a family physician, children’s education can be impacted (e.g., relocation to different province, mandatory transition from English to French school in Quebec), the recognition of acquired competencies for the spouse can be problematic.

### Program direction and policy issues that can help us move forward:

- The group also discussed how we can translate needs of family members of ill and injured CAF

members into policies or programs/initiatives. We agreed that an updated and operational definition of the military family is necessary. This definition should be consistent across government departments and it should be the basis to determine who should receive compensation and benefits, services and support.

- We also discussed the necessity for guidelines or a policy permitting the integration of family members in the transition process from military to civilian life and in the CAF member's treatment plan. This policy should address the difficulty or barriers experienced by family members to be aware or to access services.

A program or initiative should be implemented to increase family members of wounded CAF members on the services they can access, which addresses mental health literacy and use technology to reach and inform family members.

- Address the lack of cohesion or alignment between service providers – develop a policy defining the proper continuum of care and coordination between service providers
- Research conducted at DGMPRA is of high interest. The results could be effectively and efficiently disseminated amongst field workers at the annual forum of representatives of military family resource centers.

### **3. CHILD AND PARENTING OUTCOMES BREAKOUT SESSION**

#### Gaps/Needs/Issues

- Traditionally taken a glass-half-empty perspective when the majority of children are doing well, we need a better understanding of the resiliency and protective factors of this group.
- Schools may be viewed as the hub for good services. Consideration should be at the group level separated by school using military child dense and non-dense populations. This is based in the belief that military children connect with each other in a way they do not with their civilian peers.
- Teacher training is required. It was recognized that teachers are overloaded and adding this may be a challenge. US information suggests that teachers of military children may feel the need to teach differently to support those children. One of the challenges is that programming is an ad hoc system – there is no planning for implementation [lacks consistency in programs and offerings].
- Stigma continues to be an issue with all child service providers (e.g. pediatricians).
- Engage higher level specialists engaged (e.g. train a specialist at the board level of a school system) to advise to teachers/principals and to be their resource.
- Connect to youth through social media
- Implications of moving at different ages and the cumulative effect of multiple postings should be examined. This could include personality factors, number of postings, ages at posting.
- An understanding of why MFRCs/program usage is so low. Suggested reason is the requirement to bring the MFRC to the communities where military personnel live as 'satellite offices' beyond main MFRCs.
- Consideration should be given to looking at other populations with family separation (e.g. mining industry).
- Parental gender differences need to be considered.

Program direction and policy issues that can help us move forward:

- A need to outreach in order to build understanding (awareness), build capacity, building competency, build community. Have networks of networks and layer evidence on top.
- All programing needs to be at least (in order of priority)
  1. Evidence based
  2. Evidence informed
  3. Evidence inspired
  - Look to the evidence in other programs to avoid reinventing the wheel (e.g. disadvantaged youth program in US that teaches youth to communicate)
  - Program sustainably (in part due to program delivery turnover) needs to be considered in planning
  - Consideration should be given to programs (over time) being required to demonstrate impact (metrics of value)

#### **4. UNIQUE CHALLENGES OF VETERAN FAMILIES BREAKOUT GROUP**

Gaps/Needs/Issues

There are three (3) areas of challenge (based on review of the literature)

1. Caregiving and caring for those with service-related conditions
2. Transitioning
3. General impacts of military service

##### 1. Caregiving and caring for those with service-related conditions

- When looking at people having issues, the majority aren't medically released
- It's not just about health conditions (i.e. income, housing, etc.)
- Sherry Lachine (Veteran's Transition Network) stated that:
  - Their families are often dealing with toxic environments
  - They often don't realize that they're "caregivers" until it's suggested to them (the concern is that awareness among others that they are in fact caregivers is low)
- Some discussion surrounding available resources for these caregivers
  - Examples: OSISS, e-learning, VAC assistance service, toolkit being developed on mental health first aid (Mental Health Commission) being offered through the MFRCs. It is believed that the MHC will be collecting information on this.
- Another consideration is that for these services to be effective, they need to be trusted and credible. There is very little information available on what happens to people when they access these services – if the referrals are appropriate and helpful, for example.

##### 2. Transitioning

- Members and their families don't have ONE place they can access for help, regardless of where they are in transition. The lines between DND and VAC are very strict in terms of services.
  - Some exceptions to this are the Military Family Services info line, which will provide cross-references and coordinate with VAC if necessary. The Family Info Line maintained by the MFRC is another resource that will offer help without asking for ID to confirm people's eligibility.

- The MFS is also doing a pilot study to follow transitioning members as they release for up to 3 years (offering extended services at 7 MFRCs). This seems to only be considering medically-released vets, however, which is a problem (since many issues are not health or MH related).
- It was noted that the fact that MFRCs can't use VAC funding (beyond those in this pilot study) is an issue— again, the lack of shared funding is a barrier to care. There was discussion about how VAC could also tap into the MFRC to get people through their own doors – it seems like a good potential partnership.
- A barrier to the independence of the MFRCs exists. While they are all organized to meet the needs of the population in the region, it can isolate others and facilitate a perception of inconsistent availability of services. Luckily, exchange of best practices across MFRCs does seem to be a useful and welcome practice (they meet annually to share best practices).

### 3. General

- Spousal employment and income deficits are big consideration, not just in Canada – international studies are also emerging
- University of Alberta study “Wounded Vets, Wounded Families”
  - Looked at disability benefits of those with impairments
  - Gap: service often needs to derive from the needs of the vet (vs. the needs of the family)
  - Study examined QOL impacts, health impacts

## PROGRAM DIRECTION AND POLICY ISSUES THAT CAN HELP US MOVE FORWARD:

### 1. Priorities for programs

- A clear understanding the function and purpose of all the programs
- Coordination between VAC, DND, and the larger community.
- The space in which each organization operates needs to be better defined, but there also needs to be some reduction in the boundaries created by the Treasury Board. There is a great deal of fighting over resources and protectionism occurring, with little coordination.
- There needs to be an external body in place to keep people accountable in all the service delivery organizations (such as an advisory group/oversight committee).  
While such a committee did exist in the past (i.e. Don Eccels created one), it is no longer utilized, and the existing steering committee lacks oversight and accountability
- The evidence-base required before things get transformed into action can actually be a barrier, while at other times there seems to be insufficient evidence to show things are working.
- Programs need to be more client-centric
- There is a lack of community engagement – currently, barriers exist for members when they enter the civilian community. Being a “veteran” has negative connotations (i.e. an assumption of impairment) which can lead to a resistance from the civilian community to provide services.
- Consideration of the gap in programming in rural communities

### 2. Priorities for policy

- Move from providing a benefits service to a community service.
  - Currently, DND is service-focused, while VAC is benefits-focused. It needs to be veteran-

centered. With a 3<sup>rd</sup> party operator who could connect clients to services might be helpful.

- Need for more evaluation of current programs to determine how well they are working
- Need for a strategy that supports transition.
  - The focus is too short-range, instead of looking at the entire lifespan/career span of the member and their family.
  - There's a need to speak to members as they *enter* the CAF, to gauge their expectations at the outset of their career to help guide programs.
- Need for a revision of policies regarding eligibility – they often don't make sense and exclude people from services they need.
- Need to engage more with our partners in the government and elsewhere (i.e. ESDC, MHC, etc.) and policy for engaging them to help coordinate services.

<b>Family Health Working Group Outputs</b>	
Suggestions for Future Research	Program Direction/Policy Issues and Priorities
<b>Group 1 – Marital and Family</b>	
<ul style="list-style-type: none"> <li>• Intimate partner violence (and how it is defined)</li> <li>• Staying connected through deployments</li> <li>• Understanding positive processes to counterbalance negative impacts research</li> <li>• Defining family – not just nuclear</li> <li>• Divorce rates – not a lot of information</li> <li>• Micro level and need to also look at population level</li> </ul>	<ul style="list-style-type: none"> <li>• Continued investment in mil-civ collaboration</li> <li>• Supposition they won't understand our reality</li> <li>• Teachers have pivotal role (send out packages)</li> <li>• Mental health literacy</li> <li>• Policy - examine governance models - need more national model</li> <li>• Expand provisional resources</li> </ul>
<b>Group 2 – Ill and Injured</b>	
<ul style="list-style-type: none"> <li>• Financial pressure put on those who are ill and injured</li> <li>• Timing of providing services</li> <li>• Evidence basis of offered programs</li> <li>• Use of technology in the provision of care (e.g. provision of medication reminders)</li> <li>• Integrate services for spouses and members and spousal understanding of injury</li> <li>• Stigma – spouse/Ill and Injured member – can be a barrier to spousal awareness – hierarchy of illness – physical acceptable while mental harder</li> <li>• Need to enhance the preparedness of caregivers</li> <li>• Need for self-care among spouses</li> </ul>	<ul style="list-style-type: none"> <li>• Clear definitions of family</li> <li>• Better integrate family in ill &amp; injured process</li> <li>• Privacy issues therefore at least a broad-range offering</li> <li>• Better understanding of activities that are happening (what is available by who)</li> </ul>

Group 3 – Veteran Specific Issues	
<ul style="list-style-type: none"> <li>• Caregiving/service related conditions</li> <li>• Lack of understanding of services available (2-year extension of MFRC services for medically releasing); mental health first aid</li> <li>• Linking VAC and mental health websites and MFRC websites</li> <li>• Family Information Line (no identity required for users)</li> <li>• GP used as referral to other services...LASS 25% difficulty but majority not medical - more to adjusting to civilian life than health care</li> <li>• services (1-800 vac etc getting contact and referral right will spur on resource)</li> <li>• MFRCs may not always be a strength - continuity issues; are they sharing best practices</li> <li>• rural settings - relying on the gps fir</li> <li>• challenges in transitioning into civilian life</li> <li>• lower spousal income and attachment to the labour market</li> </ul>	<ul style="list-style-type: none"> <li>• External body that can be held accountable (not just stakeholders)</li> <li>• Need better understanding of evidence-based</li> <li>• Close VAC/DND/community/serving members and cross boundaries - strategies that are cradle to grave</li> <li>• Policy that needs to make send - money boundaries</li> <li>• Veteran 2020 DND/VAC - employment, homelessness, mental health, families (overreaching approach that is multi-org)</li> <li>• Community engagement</li> </ul>
Group 4 – Child and Parenting	
<ul style="list-style-type: none"> <li>• Existing research focuses on negative impact</li> <li>• Lack of examination of protective factors (resilience factors) that can buffer and those that strengthen</li> <li>• Schools - differences between academic functioning (and is it a proportional question)</li> <li>• Parenting sessions</li> <li>• Peer support (some research existing in this area)</li> <li>• Teachers - may be lack of awareness of military families (helpful for children if they do) for social support; children may not want to say; teacher/school may know but then there is stigma - limited knowledge may cause more harm than good</li> <li>• School curriculum (for staff) for understanding of military families</li> <li>• Use of social media</li> <li>• Age differences in outcomes (deployments vs relocations)</li> <li>• Services - lack of use</li> <li>• Strategies to communicate with parents</li> </ul>	<ul style="list-style-type: none"> <li>• 4-part process: awareness, capacity, competence, building community</li> <li>• Evidence-based, evidence-informed, evidence-inspired</li> <li>• Engagement problems (don't reinvent the wheel – examine existing programs)</li> </ul>

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## ★ Clinical research 101: A primer for health care professionals

Eric Robitaille, University of Toronto and Luc J. Hébert, Laval University

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### RATIONALE

Due to their regular contact with patients, health care professionals are in an optimal position to contribute to clinical research and thereby promote a culture of quality improvement and evidence informed practice. To promote their participation, health care professionals may benefit from a practical review of the elements of clinical research and the value of clinical outcome measures. This working group was designed for health care professionals who are potentially interested in improving their practice and participating in clinical research. Information was shared in plain language, with an emphasis on group interaction, using clinically relevant practical examples from physical rehabilitation medicine.

The learning objectives of this session are to:

1. Understand the value of each of the research designs in the hierarchy of evidence.
2. Explore the use of a standardized reference tool for writing case reports.
3. Recognize the recommended characteristics of clinical outcome measures & explore how these may direct practice and research.
4. Discuss the barriers and facilitators to engaging health care professionals to participate in clinical research.

### RELEVANCE

By providing a pragmatic review of research designs and promoting the use of high quality clinical outcome measures, this RTWG is directly in line with CIMVHR's mission and key outcomes. A practical knowledge of research designs is instrumental for health care professionals in order for them to determine which research evidence is most appropriate to answer a specific clinical question in the best interest of their patient. Furthermore, health care professionals have regular and direct contact with CAF members, and thereby are excellent resources for researchers to consult with in order to formulate and operationalize clinically relevant research questions. By promoting the routine use of reliable, valid & responsive clinical outcome measures to objectify patient impairments, activity limitations and participation restrictions during clinical visits, this RTWG encouraged the development of a transparent culture of quality improvement and evidence informed practice. The quantification of clinical outcome measures would allow for local evaluation of health service effectiveness, and if accumulated in a large data set and analyzed may contribute to informed policy decision making.

### SUMMARY

#### Description of participants

Overall, the 10 participants attending this RTWG described themselves as clinicians (56%), researchers (25%) followed by administrators (19%); described their formal research education as graduate level courses (91%) followed by undergraduate courses (9%); and described their experience in research as a researcher (46%), clinician (27%) participant (20%), followed by none (7%). Five participants reported their profession as Physical Therapists, and 3 participants reported their profession as mental health professionals. Furthermore, 50% of participants described themselves as clinician/researchers, which offers an explanation for the high reports of graduate level research education and experience as

researchers. None of these participants reported having participation in clinical research as part of their mandate or job descriptions, and all of these participants reported challenges in seeking protected time and resources in order to participate in clinical research.

## **PRE & POST WORKSHOP**

Prior to participating in the RTWG, only 6 participants reported knowing the major differences between research designs in the levels of evidence, only 2 participants reported knowing the recommended method to write a case report, only 5 reported knowing the recommended characteristics of clinical outcome measures and only 6 participants reported feeling comfortable participating in clinical research in some capacity. Following participation in the RTWG, all participants reported knowing; the major differences between research designs in the levels of evidence, the recommended method to write a case report, the recommended characteristics of clinical outcome measures, and reported feeling comfortable participating in clinical research in some capacity. All participants reported that the workshop met its' stated objectives, and expressed interest in returning to this RTWG next year. Therefore, the RTWG clearly met its' stated objectives, and if comparable in attendance to other RTWG, should be considered for inclusion during Forum 2016.

## **BARRIERS & FACILITATORS**

The most frequently reported barriers to using clinical outcome measures was a perceived lack of knowledge on appropriate outcome measures, followed by a lack of time to complete them. The most frequently reported barriers to participating in clinical research were a lack of time, followed by a lack of knowledge of opportunities to participate. The most frequently reported facilitators to using clinical outcome measures were protected time, followed by development of accessible outcome measures. The most frequently reported facilitators to participating in clinical research were protected time, followed by an awareness of opportunities to participate.

## **DISCUSSION**

In small group discussion, there was strong consensus that a lack of time was a consistent barrier, and establishing protected time was recommended to encourage the use clinical outcome measures and/or participate in clinical research. Many participants acknowledged that as their job description did not mandate participation in clinical research, they often had to either petition their supervisors for protected time, or complete research projects on their own time, neither of which were considered sustainable. Furthermore, presentations advertised at the Forum suggested to participants that they were not aware of parallel research projects in their area of interest. Discussion included the potential for a development of a list of researchers and health care professionals whom may contact one another to promote collaboration and maximize efficiency.

## **THE WAY AHEAD**

Consider strategies to:

Clinical research participation

- Develop an accessible contact list of researchers and health care professionals to promote research collaboration and/or mentorship
- Develop an accessible bank of research projects actively seeking participants to promote awareness of research opportunities
- Discuss approaches to requesting protected time from supervisors for clinicians interested in participating in clinical research



## Clinical outcome measures

- Develop an accessible bank of recommended clinical outcome measures in the areas of practice
- Develop education/training modules for recommended clinical outcome measures
- Discuss approaches to requesting appropriate clinical time to complete outcome measures
- Recommend research opportunities for clinical outcome measure development

## KT PLAN

This summary will be disseminated to participants whom expressed interest in receiving it at the RTWG session. Furthermore, as the participants were largely comprised of Physical Therapists and Mental Health Professionals, this report may also be of interest to their respective National Practice Leaders. This report may be used as a catalyst for these Leaders to initiate a dialogue with their local clinicians/researchers regarding the above reported barriers perceived to; affect participation in clinical research and completion of clinical outcome measures and thereby promote local strategies to forge the way ahead.

The prospect of an accessible contact list of researchers and health care professionals to promote research collaboration and/or mentorship, and a bank of research projects actively seeking participants to promote awareness of ongoing research opportunities, was discussed. The 'Researcher-Clinician Connection' database from the Canadian Physiotherapy Association may be used as a framework for consideration. The development of an accessible deposit space where electronic documents such as clinical outcome measures may be shared amongst participants was also discussed. If these concepts are of interest to CIMVHR, the Chair would like to express interest in exploring these initiatives.

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## Veteran Research Datasets

Dr. Linda VanTil, Veterans Affairs Canada

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## CONTEXT, BACKGROUND

Veteran research datasets in Canada provides researchers with major potential to study the health of Canadian Veterans. To increase knowledge of these datasets, this workshop examined several population-based research databases. The objectives of the workshop were to:

- 1) Describe strengths and limitations of datasets
- 2) Answer methodology questions from interested researchers
- 3) Initiate potential collaborative analyses of various datasets.

Statistics Canada houses Veteran data on mortality <sup>(1)</sup> and income <sup>(2)</sup> that have been reported on using aggregated data tables. Cross-sectional survey data is available to any Canadian researcher through StatCan Research Data Centres (see <http://www.rdc-cdr.ca/>), for the 2010 Survey on Transition to Civilian Life and 2013 Life After Service Survey <sup>(3)</sup>. Strengths of these surveys are that Veteran status is confirmed by DND records, the sample is nationally representative of Canadian Veterans released since 1998, civilian comparisons are available using the Canadian Community Health Survey, and content is comprehensive across the determinants of health. Limitations include the data is cross-sectional, and variables are self-reported.

Institute for Clinical Evaluative Sciences (ICES) in Toronto houses publicly-funded health information collected and linked on all Ontarians with an OHIP card. The data holdings at ICES are described at: [www.ices.on.ca/Data-and-Privacy/ICES-data/Data-dictionary](http://www.ices.on.ca/Data-and-Privacy/ICES-data/Data-dictionary) . Veterans are identified in ICES data to avoid a 3 month waiting period for OHIP coverage, using 2 questions:

- 1 "Have you recently left the Canadian Forces, RCMP?"
- 2 "Are you a reservist returning from an out-of-country posting?"

Strengths of this data are that it is population-based, allows linkage to a wealth of routinely collected provincial healthcare data, and civilian comparator group is available. Limitations of this data are that it does not distinguish between RCMP and CAF Veterans, no linkage to service history, routine collection can change over time or by reporting institutions, and access is only available in collaboration with an ICES scientist. The ICES data demonstrates potential to study health services utilization for Ontario Veterans released from 1990 to 2014 <sup>(4)</sup>.

The Life After Service Studies (LASS) program of research examines many aspects of health of Canadian Veterans, and it available to any Canadian researcher. Cross-sectional survey data is available for the 2010 and 2013 data collection cycles <sup>(5)</sup>. While LASS has led the way in describing the health of Canadian Veterans, other datasets are being identified with potential for Veteran research. Researchers are encouraged to initiate analyses of various datasets. Workshop participants may become potential collaborators in research that can improve the health of Veterans in Canada.

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# Investigational opportunities as applied to public health concerns in the CAF

LCol Andrew Currie

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## CONTEXT, BACKGROUND

Public health, which focuses on protection and enhancement of health at the population level, has been, is and will continue to be an important contributor to the health of Canadian Armed Forces (CAF) members and the effectiveness of the CAF as a fighting force, thereby contributing to mission success. The Directorate of Force Health Protection (D FHP) is “the public health department” of the CAF. In common with the civilian sector, D FHP includes elements of epidemiology and health surveillance, health promotion, occupational/environmental health and communicable disease control. However, public health as applied in the CAF does differ from the civilian situation in a number of ways, for example: the age cohort is curtailed (e.g. no children/adolescents; no elderly; no school health); the sex ratio is strongly skewed to males; mission success is a strong motivator; consideration extends to risks that occur outside of Canada; and, the threshold for public health action is often lower (than in the civilian sector).

## OBJECTIVES

The objectives of this session were designed to provide an overview of public health practice in the CAF including the structure of D FHP, its mandate for evidence-informed policy and program development, and its role in research; and to discuss of gaps and consequent research needs and opportunities related to specific public health issues in the CAF.

## RELEVANCE

FHP looks directly at the health of the CAF member. Improvement in how public health issues are researched and addressed leads to improvement of health indicators and ultimately enhances the lives of members.

## SUMMARY OF DISCUSSIONS, AND CONCLUSIONS

The Working Group, “Investigational opportunities as applied to public health concerns in the CAF” was held at CIMVHR on Monday, 23 Nov 15 from 0900-1200 hrs.

The presentations were (not necessarily in order of presentation):

- Col S Malcolm, “Investigational opportunities as applied to health concerns in the CAF”
- Dr S Schofield, “Intervention, evidence and values and preferences”
- K Bulger, “Going rogue? Including e-cigarettes as part of a tobacco harm reduction strategy”
- L Laferriere, “CAF injury prevention research opportunities”
- Dr M Maher, “Investigational opportunities in health surveillance”
- Dr M Tepper, “Prioritization for public health action in the CAF”
- Dr M Tepper, “Prioritizing public health issues: stockpiling antivirals for Pandemic Influenza”
- No particular theme(s) came about from the WG. It is unknown if any research proposals will have been stimulated by the WG, as no particular discussion or comments made mention.

**THE WAY AHEAD**

Unless CIMVHR attracts a substantially more public health/occupational health audience, such a WG would not seem to be of overmuch value. Although the topics were current and the discussion generated quite in-depth, the low attendance (7 participants) was an obvious concern.

**KT PLAN**

Given the above, no plan is envisioned as a result of this Working Group.