



LIFE AFTER SERVICE STUDIES (LASS) SECONDARY ANALYSIS (2011 SERIES - RELEASE 7)

Survey on Transition to Civilian Life: Veterans not Receiving Benefits from VAC

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Research Questions

- 1. What were the health, disability and determinants of health status of CF Regular Force personnel who released during 1998-2007 and were not participating in VAC programs (non-clients)?
- 2. How many non-clients might have needed assistance with re-establishment?

Background

In the Survey on Transition to Civilian Life (STCL), two-thirds of CF former Regular Force personnel who released during 1998-2007 were not receiving benefits from VAC (Table 1). Although many were healthy, did not report disability and had good determinants of health status, comparatively more than in the general Canadian population reported arthritis, back problems, participation/activity limitation and obesity (Thompson et al 2011); 54% reported at least one physical health condition, 13% reported at least one mental health condition, a majority with chronic health conditions attributed them to military service, and 17% reported a difficult adjustment to civilian life.

An estimated 9,082 (8,969-9,194) or 43% of non-clients had a chronic health condition and/or participation and activity limitation, and attributed their condition to military service (Table 1). Since the first STCL report (Thompson et al 2011), MacLean and Poirier (2011) found that 7,078 (7,078-8,159) non-clients had approached VAC (had a VAC client ID) and about 4,364 (3,917-4,811) had applied for benefits as of March 2009.

This additional secondary analysis was conducted because VAC program areas wanted to better understand Regular Force Veterans (former CF personnel) who were not participating in VAC programs.

Table 1. Former CF personnel who released during 1998-2007 and were not participating in VAC programs as of March 2009.

Non-clients	Population Estimate (95% Confidence Interval)	Population Estimate (95% C.I.)
Total non-clients in the STCL study population	21,247 (21,059 - 21,436)	66% (65-67%)
At least one physical health condition ^A	11,398 (10,845 - 11,951)	54% (51-57%)
At least one mental health condition ^B	2,722 (2,335 - 3,109)	13% (11-15%)
Difficult adjustment to civilian life	3,593 (3,516 - 4,031)	17% (16-19%)
Had a chronic health condition and/or participation and activity limitation, and attributed their condition to military service	9,082 (8,969-9,194)	43% (42-44%)
Approached VAC (had a client ID)	7,618 (7,078-8,159)	36% (33-39%)
Applied for benefits to VAC	4,363 (3,917-4,811)	21% (19-23%)

^AAsthma, arthritis, back problem, high blood pressure, diabetes, heart disease, cancer, stroke, bowel disorder, hearing problem, stomach ulcer.

Methods

The Survey on Transition to Civilian Life asked 3,154 Regular Force former personnel who released from service during 1998 to 2007 about their health, disability and determinants of health (MacLean et al 2010). STCL was a telephone survey conducted in February-March 2010 by Statistics Canada for Veterans Affairs Canada and the Department of National Defence. Respondents were identified using a DND human resources database. The survey used a stratified random sampling design with three groups: Veterans receiving New Veterans Charter benefits programs and services through VAC (NVC clients), Veterans receiving disability benefits (DP clients) and Veterans not participating in VAC programs (non-clients).

For this report, a descriptive analysis of the data was conducted using weighted population estimates of proportions (MacLean et al 2010 and Thompson et al 2011). Confidence intervals at the 95% level are available on request to check statistical significance for small differences between population estimates of interest. Readers should refer to the original report (Thompson et al 2011) to get a sense of the sizes of 95% confidence intervals characteristic of this survey. Population estimates are suppressed in the tables for sample sizes less than 30 respondents, because they are considered statistically unreliable.

Characteristics of Non-Clients

Table 2 shows the characteristics of non-clients compared to VAC clients and the total STCL study population. Although age ranges were the same, there

^BMood disorder, anxiety disorder, depression or anxiety, PTSD.

were more younger former CF Regular Force personnel in the non-client group than the clients. Non-clients more often were never married, were less likely to have deployed, more likely to have been recruits and cadets, and more likely to have voluntarily released. In keeping with their generally younger age, non-clients much more often reported good or excellent well-being and good quality of life, almost half (43%) had none of the chronic health conditions asked about in STCL (compared to 6% of VAC clients who had no chronic health conditions) and far fewer non-clients had 12-month suicidal ideation compared to clients (4% versus 10%).

Table 2. Characteristics of non-client and VAC client CF Regular Force Veterans who released during 1998-2007.

Variable	Category	Weighted Population Estimates (% of STCL Population)		
		Non-Clients	Clients	Total
Age at release from	≤ 19 Years	5.9	Х	3.9
service	20-29	33.7	7.1	24.8
	30-39	19.8	25.8	21.8
	40-49	27.5	50.7	35.3
	50-59	12.9	16.0	13.9
	60-69	х	Х	х
	Total	100.0	100.0	100.0
Age at survey	≤ 19 Years	х	Х	х
•	20-29	22.5	2.5	15.8
	30-39	22.5	10.3	18.4
	40-49	26.5	48.1	33.7
	50-59	20.6	31.2	24.2
	60-69	8.0	7.8	7.9
	Total	100.0	100.0	100.0
Gender	Male	87.8	88.8	88.2
	Female	12.2	11.2	11.8
	Total	100.0	100.0	100.0
Marital status time of	Married/Commonlaw	73.4	79.9	75.6
survey	Widowed/Separated/Divorced	7.2	13.2	9.2
	Single/Never married	19.5	6.9	15.3
	Total	100.0	100.0	100.0
Length of Service	< 2 years	25.6	1.5	17.5
Length of Service	2 to 9 years	19.8	10.1	16.5
	10 to 19 years	9.5	20.5	13.2
		9.5 45.1		_
	≥ 20 years	_	67.9	52.8
Deleges Time	Total	100.0	100.0 1.8	100.0 4.6
Release Type	Involuntary	6.0 8.5	1.8 55.7	4.6 24.4
	Medical Voluntary	70.9	55.7 29.4	24.4 57.0
	Retirement Age	70.9	29. 4 6.1	7.0
	Service Complete	7.4	6.9	7.0
	Total	100.0	6.9 100.0	100.0

Variable	Category	Weighted Population Estimates (% of STCL Population)		
		Non-Clients	Clients	Total
Deployment 30+ days	Yes	54.7	85.4	65.0
anywhere	No	45.3	14.6	35.0
	Total	100.0	100.0	100.0
Deployment outside	0	9.6	6.2	8.1
Canada	1	26.1	18.2	22.6
	2	17.7	19.0	18.3
	3 or more	46.6	56.6	51.0
	Total	100.0	100.0	100.0
Rank	Officers	9.0	6.1	8.0
	Junior Officers	9.5	4.7	7.9
	Cadets	6.6	x	4.5
	Senior NCM	23.2	38.2	28.2
	Junior NCM	22.1	46.0	30.1
	Privates	8.8	1.8	6.5
	Recruits	20.8	2.7	14.7
	Total	100.0	100.0	100.0
Education at time of	Less than high school	5.9	8.4	6.8
survey	High school	38.4	45.1	40.7
	Post-secondary	55.7	46.4	52.6
	Total	100.0	100.0	100.0
Service Branch	Air Force	31.8	29.8	31.1
	Army	45.3	55.7	48.8
	Navy	17.1	12.9	15.7
B 1 111 141	Total	100.0	100.0	100.0
Perceived Health	Very good or excellent	70.0	27.7	55.8
	Good	22.4	35.3	26.7
	Fair or poor	7.7	37.1	17.5
Devenium de mantal basith	Total	100.0	100.0	100.0
Perceived mental health	Very good or excellent	76.9	46.0	66.5
	Good	16.6	24.6	19.3
	Fair or poor Total	6.5 100.0	29.3	14.2
Satisfaction with Life	Satisfied or very satisfied	90.4	100.0 74.1	100.0 84.9
Satisfaction with Life	Neither satisfied nor			
	dissatisfied	6.2	12.0	8.2
	Dissatisfied or very dissatisfied	3.4	13.9	7.0
	Total	100.0	100.0	100.0
Stress in your life	Not at all or not very stressful	41.6	27.2	36.8
	A bit stressful	41.2	43.7	42.0
	Extremely or quite a bit stressful	17.2	29.1	21.2
	Total	100.0	100.0	100.0
ST-12 Quality of Life	SF-12 0-9	х	х	х

Variable	Category	Weighted Population Estimates (% of STCL Population)		
		Non-Clients	Clients	Total
PCS (Physical)	SF-12 10-19	Х	4.2	1.6
	SF-12 20-29	x	24.4	9.5
	SF-12 30-39	6.8	28.9	14.2
	SF-12 40-49	16.6	21.8	18.3
	SF-12 50+	74.4	20.7	56.4
	Total	100.0	100.0	100.0
ST-12 Quality of Life	SF-12 0-9	х	Х	х
MCS (Mental)	SF-12 10-19	х	1.4	0.8
	SF-12 20-29	2.8	10.8	5.5
	SF-12 30-39	4.8	16.2	8.6
	SF-12 40-49	11.0	15.8	12.6
	SF-12 50+	81.0	55.8	72.5
	Total	100.0	100.0	100.0
Chronic Health	No Conditions	43.3	5.6	30.6
Conditions	At least 1 physical condition	53.6	91.4	66.3
	Hearing Problems	17.5	48.2	27.8
	Arthritis	12.6	44.8	23.4
	Back problems	27.9	64.1	40.1
	Pain/discomfort always	23.9	74.4	40.9
	Pain/discomfort reoccur	45.1	77.5	56.0
	Asthma	5.0	7.4	5.8
	COPD	X	5.1	3.2
	Diabetes	4.2	8.1	5.5
	Cancer	X	X	1.2
	Bowel disorders	4.3 24.4	11.9 36.1	6.9 28.3
	Obesity At least 1 mental condition	12.8	44.8	23.6
	Mood disorders*	12.6 X	6.4	3.2
	Depression or Anxiety	11.0	38.6	20.3
	PTSD	X	28.7	11.0
	Anxiety Disorder	4.6	20.7	10.0
Suicidality	12-Month Ideation	3.5	10.3	5.8
Comorbidity	Physical & Mental Health	9.8	41.7	20.5
	Triad: MSD & Pain or Discomfort & Mental Health	5.8	35.6	15.8
Disability: Participation	Needs help at least one task	5.0	40.8	17.1
and Activity Limitation	Does not need help	95.0	59.2	82.9
	Total	100.0	100.0	100.0
Social Support	Low	26.7	44.8	32.7
. 1. 1	Not low	73.3	55.2	67.3
	Total	100.0	100.0	100.0
Mastery	Low	X	4.6	2.1
•	Middle	63.8	74.9	67.5
	High	35.4	20.5	30.4

Variable	Category	Weighted Population Estimates (% of STCL Population)			
		Non-Clients	Clients	Total	
	Total	100.0	100.0	100.0	
Heavy drinker	≥ 5 drinks one occasion, ≥ 12 times a year	26.2	24.2	25.6	
	Very or somewhat strong	62.3	52.1	58.9	
Sense of Community Belonging	Very or somewhat weak	37.7	47.9	41.1	
Delonging	Total	100.0	100.0	100.0	
Income	Workers below LIM	4.9	Х	4.3	
	Non-Workers below LIM	x	11.1	12.5	
Adjustment to Civilian	Very or moderately easy	70.5	44.6	61.8	
Life	Neither difficult nor easy	12.6	13.4	12.9	
	Very or moderately difficult	16.9	41.9	25.3	
	Total	100.0	100.0	100.0	
Health System	Prescription Drug Insurance	89.4	97.1	92.0	
	Dental Insurance	84.2	92.4	87.0	
	Eye Glasses Insurance	81.0	91.2	84.4	
	Regular Medical Doctor	78.4	89.1	82.0	

Notes:

x Sample size < 30.

Health, Disability and Determinants of Health Status of Non-Clients

In general, non-clients were better off than both the VAC client groups and the general Canadian population, however some were experiencing problems, and many attributed their health and disability states to military service (Thompson et al 2011).

Age is an important determinant of health. Among non-clients, there were considerably more young adults than there were among clients: 45% of non-clients were less than 40, compared to 13% of clients (Figure 1). For example, the finding that compared to non-clients without health conditions, those with health conditions tended to be older, married, enrolled earlier, longer in service, released earlier, deployed, higher ranked, and been released for medical reasons (Table 3) could be influenced significantly by age. As in the general population, non-clients reported chronic physical health conditions more often with advancing age (Figure 2), while the rate of reporting mental health conditions diminished in later adulthood (Figure 2). Age could explain in large part why younger non-clients more often reported no chronic health conditions, while the reverse was true for older non-clients (Figure 2).

It is important not to focus only on subgroups, because non-clients with health conditions included all ages, marital status, ranks, lengths of service and other characteristics (see tables).

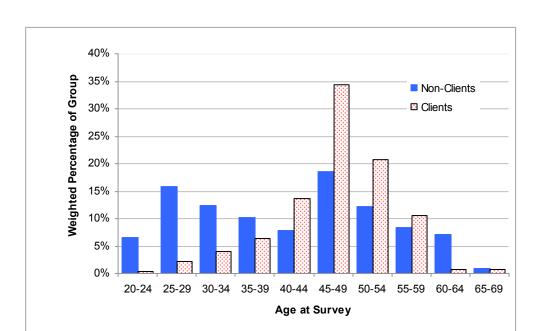


Figure 1. Comparison of ages of non-clients and clients in STCL.

Figure 2. Prevalence of chronic health conditions by age group

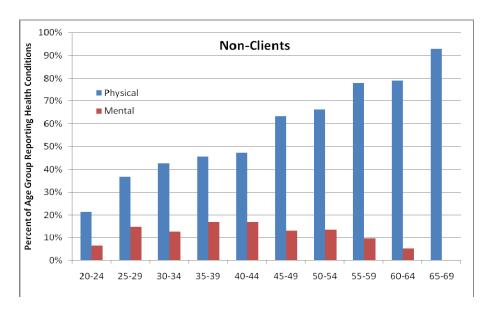


Figure 3. Age at survey of non-clients with and without chronic health conditions.

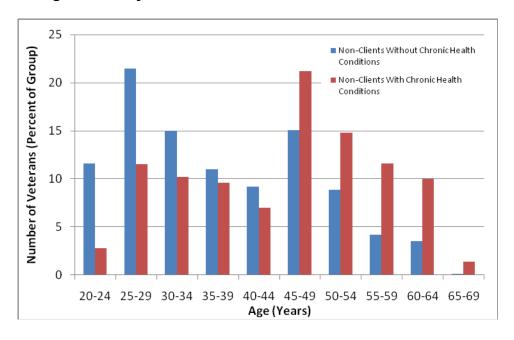


Table 3. Characteristics of non-clients with health conditions compared to those without.

Mariabla	0-4	Weighted Population Estimate (% of Non-Clients)		
Variable	Category	With Health Conditions	With no Health Conditions	
Age groups by age at	≤ 19 Years	х	9.7	
release from service	20-29	25.5	44.4	
	30-39	20.4	19.1	
	40-49	32.3	21.2	
	50-59	18.5	5.5	
	60-69	x	x	
Age groups by age at	≤ 19 Years	х	х	
survey	20-29	14.4	33.1	
	30-39	19.7	26.0	
	40-49	28.1	24.3	
	50-59	26.4	13.1	
	60-69	11.4	х	
Gender	Male	87.3	88.4	
	Female	12.7	11.6	
Marital status time of	Married/Commonlaw	77.8	67.6	
survey	Widowed/Separated/Divorced	9.1	x	
	Single/Never married	13.1	27.8	
Length of Service	< 2 years	16.0	38.2	
	2 to 9 years	18.0	22.2	
	10 to 19 years	10.7	7.8	
	≥ 20 years	55.3	31.8	
Release Type	Involuntary	х	8.4	
	Medical	12.9	х	
	Voluntary	64.3	79.6	
	Retirement Age	10.7	x	
	Service Complete	7.9	6.1	
Deployment 30 days or	yes	63.7	43.0	
more	no	36.3	57.0	
Deployment outside Canada	0	8.5	X X	
. ,	1	24.7	28.8	
	2	17.7	17.7	
	3 or more	49.0	41.9	
Rank ^B	Officers	11.1	6.3	
	Junior Officers	8.5	10.8	
	Cadets	x	10.7	

Variable	Category	Weighted Population Estimate (% of Non-Clients)		
		With Health Conditions	With no Health Conditions	
	Senior NCM	29.0	15.5	
	Junior NCM	26.3	16.7	
	Privates	6.3	12.1	
	Recruits	15.4	27.9	
Education at time of survey	Less than high school	7.6	х	
	High school	39.1	37.5	
	Post-secondary	53.3	58.8	
Service Branch	Air Force	33.6	29.3	
	Army	41.1	50.8	
	Navy	18.8	15.0	

Notes:

x Sample size < 30.

How many Non-Clients might have needed VAC assistance?

For a variety of reasons, it is difficult to estimate how many might have required assistance from VAC and been eligible to receive benefits and services. For example, VAC clients are so heterogeneous that it is difficult to characterize a "typical VAC client" to identify non-clients who might fit such a profile. The electronic data do not contain sufficient information on why non-clients who approached VAC were not clients at the time of the survey, which means that a hand-search file review would be necessary.

Proportions Reporting Problems

A first approach therefore was to scan Table 2 to look for health, disability and determinants of health characteristics of non-clients usually associated with the types of problems that can prompt Veterans to seek help. The result is shown in Table 3, where proportions range from too small to produce a reliable estimate for cancer to 54% for all chronic physical health conditions. Some problems would be minor, not prompting Veterans to require or seek assistance, and others would not be related to military service.

- Wellbeing and quality of life: 8% reported fair/poor perceived health, 7% fair/poor perceived mental health, 3% dissatisfaction with life, 17% life stress, 26% below norm SF-12 Physical Component Score and 20% below norm Mental Component Score.
- Health conditions and disability: 45% reported recurrent pain or discomfort, 28% reported back problems, 13% reported arthritis, and 13% reported a chronic mental health condition. STCL did not assess disease severity, and in many cases severity probably would have been mild. Of more significance, 10% reported having both chronic physical and mental health conditions; 6% reported the triad of musculoskeletal conditions (back problems or arthritis), pain or

- discomfort and at least one of the four chronic mental health conditions; and 5% reported participation and activity limitation such that they required help with an independent activity of daily living.
- Determinants of health: 26% reported heavy drinking, 27% reported low social support, and 38% reported a weak sense of community belonging. The numbers of non-clients who reported incomes below the Low Income Measure were too small to produce reliable population estimates.

Difficult Adjustment to Civilian Life

Table 4 compares non-clients who reported a difficult adjustment to civilian life to those who reported an easy adjustment. They more often reported problems with health, disability and determinants of health at the time of the survey than those who reported an easy adjustment; however such problems were not uncommon among non-clients who reported an easy adjustment. In the absence of measures for the severity of health conditions and disability, and confirmation about the nature of their problems at the time they released, this descriptive analysis cannot discriminate between those who might have needed assistance in transitioning to civilian life from those who might not. Nor is it possible to determine how many would have been eligible for VAC programs, services and benefits without conducting a file review by hand. In spite of limitations, these findings provide a sense of the significant minority of non-clients who might have benefitted from assistance with transition to civilian life.

Table 4. Non-clients' status of health, disability and determinants of health by ease of adjustment to civilian life.

	Weighted Population Estimate (% of Non-clients)			
Characteristic	Of those reporting easy adjustment	Of those reporting difficult adjustment	Of all Non- Clients	
Well Being:				
Perceived Health: Fair or poor	4.3	17.2	7.7	
Perceived mental health: Fair or poor	3.3	18.5	6.5	
Satisfaction with Life: Dissatisfied or very dissatisfied	x	Х	3.4	
Life stress: Extremely or quite a bit stressful	12.9	33.2	17.3	
ST-12 Quality of Life PCS (Physical): Below Norm	20.8	37.9	25.6	
ST-12 Quality of Life MCS (Mental): Below Norm	10.9	46.2	19.1	
Chronic Physical Health Conditions				
At least one chronic physical health condition	50.1	<i>65.4</i>	53.6	
Hearing Problems	15.0	26.7	17.5	
Arthritis	11.6	15.9	12.6	
Back problems	24.3	38.3	27.9	
Pain/discomfort always	18.1	42.0	23.9	
Pain/discomfort reoccur	40.4	58.6	45.1	
Asthma	4.2	х	5.0	
COPD	x	x	х	

	Weighted Population Estimate (% of Non-clients)			
Characteristic	Of those reporting easy adjustment	Of those reporting difficult adjustment	Of all Non- Clients	
Diabetes	3.9	x	4.2	
Cancer	x	x	х	
Bowel disorders	3.7	x	4.3	
Obesity	23.4	26.0	24.3	
Chronic Mental Health Condition At least one chronic mental health condition	8.0	29.3	12.8	
Mood disorders	x	x	х	
Depression or Anxiety	6.7	25.0	11.1	
PTSD	x	x	х	
Anxiety Disorder	x	Х	4.6	
Suicidality12-Month Ideation	x	x	3.5	
Comorbidity:				
Physical & Mental Health	5.9	23.2	9.8	
Triad: MSD & Pain or Discomfort & Mental Health	3.2	14.8	5.8	
Disability: Participation and Activity Limitation: Needs help at least one task	х	x	5.0	
Determinants of Health:				
Income: Below Low Income Measure – Workers	x	x	4.9	
Income: Below Low Income Measure – Non-Workers	х	X	х	
Social Support: Low	19.6	47.3	26.7	
Mastery: Low	x	x	х	
Heavy drinker: ≥ 5 drinks one occasion, ≥ 12 times a year	27.1	28.7	26.3	
Sense of Community Belonging: Very or somewhat weak	32.3	55.3	37.6	
Adjustment to Civilian Life: Very or moderately difficult	х	100.0	16.9	

Notes:

x Sample size < 30.

Discussion

Two-thirds of CF former Regular Force personnel who released during 1998-2007 were not receiving benefits from VAC. Of those, many attributed their health conditions and disability to military service, and an important minority had problems with health, disability and the determinants of health.

Another secondary analysis of the STCL findings showed that a significant number of former CF Regular Force personnel who released during 1997-2008 had chronic health conditions and attributed them to military service (MacLean and Poirier 2011). Since STCL was undertaken only 3-13 years after the study population left military service, some of the non-clients are likely to approach VAC for assistance with health and disability issues in years to come, and some are doing so already.

STCL did not collect data on why non-clients were not participating in VAC programs. Some might have applied for VAC programs, services and benefits and been declined, some might not have applied for a variety of reasons but known they could have been eligible, and some might not have applied because they did not know they might be eligible. Anecdotally, comments have been made about reluctance among some CF personnel and former personnel to engage in the application process, and some might be obtaining help for their issues from other provincial and federal agencies. Further research is required to determine why the third of non-clients who approached VAC were not clients.

Throughout its history, VAC and its predecessor departments have received applications from Veterans throughout their life courses after leaving service. The non-client group was young and middle—aged, averaging 43 years and ranging 20-66 years. A significant proportion were in the youngest age groups and healthy. As these non-clients age, many will acquire chronic health conditions. Given the high rates of self-attribution to military service (Thompson et al 2011) many are likely to approach VAC with claims for assistance over their life courses. In 2008, for example, former CF personnel who served after the Korean War were found eligible for disability benefits many decades after leaving service (MacLean et al 2010).

Conclusions

Two-thirds of former CF Regular Force personnel who released during 1998-2007 were not receiving benefits from VAC (non-clients). Many non-clients reported problems with health, disability and determinants of health, and attributed their chronic health conditions and disability to military service. Problems were more common among those who reported having had a difficult adjustment to civilian life. Clearly, many non-clients had problems with health, disability and determinants of health, and a significant number of those believed their problems were due to military service. These findings have broad implications for VAC as it works through transformation, including DND/CF liaison, outreach, entitlement, case management, health care, prevention and planning for the future.

Interpretation Guidance

- These findings cannot be generalized to all former Canadian Forces personnel because the survey included only Regular Force personnel who released during 1998-2007.
- The survey is representative of CF Regular Force personnel who released during 1998-2007. The survey did not include those who could not be contacted; were serving in the CF; or were living in an institution, in the Territories, or out of the country.
- The survey might not be representative of all members of the respondents' originating age and era cohorts because (1) the survey did not include those who were still serving or had re-enrolled in the CF, or those living in institutions, the Territories or out of the country; and (2) the response rate for non-clients (66% of the population) was 59%.
- STCL was a point-in-time, cross-sectional survey, therefore no conclusion can be drawn about whether (a) military service played a role in causing suicidal feelings, and (b) the effect of VAC programs, services and benefits.
- Proportions were not adjusted for age, sex and other confounders so as to allow direct comparison between subgroups. In tables where 95% confidence intervals for estimates are not shown, they are available.

References

Thompson JM, MacLean MB, Van Til L, Sudom K, Sweet J, Poirier A, Adams J, Horton V, Campbell C, Pedlar D. Survey on Transition to Civilian Life: Report on Regular Force Veterans. Research Directorate, Veterans Affairs Canada, Charlottetown, and Director General Military Personnel Research and Analysis, Department of National Defence, Ottawa. 04 January 2011:103 p.

MacLean MB, Poirier A. Contact with Veterans not in receipt of VAC benefits – Data from the Survey on Transition to Civilian Life. Life After Service Studies (LASS) Secondary Analysis. 2011 Series, Release 3. Veterans Affairs Canada, Charlottetown. 11 March 2011:6 p.

MacLean MB, Van Til L, Thompson JM, Pedlar D, Poirier A, Adams J, Hartigan S, Sudom K. Life After Service Study: Data Collection Methodology for The Income Study and The Transition to Civilian Life Survey. Veterans Affairs Canada Research Directorate Technical Report. 2010:79 p.