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Health Care

Existing Conditions Technical Memorandum



Date: April 4, 2010
To: Health Care Expert Panel
From: Craig Savage and Beth Weidner, Health Planning Source, Inc.
Re: Existing Conditions of Health Care Services in the JBLM Region

Introduction

The existing conditions report below includes information received following the submission by Health Planning Source (HPS) of the existing conditions technical memorandum in April 2010. In addition, this report reflects feedback provided by the Health Care Expert Panel members in the intervening months.

Methodology

Existing conditions were first determined through a series of interviews with key health care providers during February and March 2010. Interviewees included members of the Health Care Expert Panel, as well as other providers recommended by the Expert Panel. Please see Appendix 1 for a listing of all health care interviewees by organization. In addition to this primary research, HPS requested utilization and supply data from regional health care providers. All data that have been received are included in this report. HPS does not anticipate receiving any additional data.

Findings

The health of soldiers and their families is affected by more than medical disorders. Access, transportation, economic, educational, social, environmental, and other factors all play a role and many of these are addressed by other expert panels. Certain characteristics of soldiers make them more likely to have certain health care needs: they are often young, displaced from their usual social support

system, limited in financial resources, and exposed to significant physical and emotional work stress. This report examines existing health care resources that encompass medical, oral, behavioral, and community health.

Department of Defense Health Services

The Department of Defense (DoD) is committed to ensuring that active duty soldiers and their families are deployment ready. As part of this mission, DoD provides health care services to beneficiaries through its Military Treatment Facilities and TRICARE network providers. The sections below outline the services available at Madigan Army Medical Center and in the JBLM region’s TRICARE network.

Madigan Army Medical Center

Madigan Army Medical Center (Madigan), located on Joint Base Lewis McChord, is the JBLM region’s only Military Treatment Facility (MTF). Madigan currently has a beneficiary population of approximately 108,000 soldiers, family members and retirees located within a six-state region. Madigan is one of the Army’s most state-of-the art facilities and is one of only three facilities in the U.S. Medical Command (MEDCOM) with Level 2 Trauma status. In addition, Madigan is a teaching hospital and offers Graduate Medical Education. Madigan not only provides inpatient services, but offers an extensive array of outpatient physician clinics and ambulatory services on-site, as well as a highly utilized pharmacy.

Madigan provides primary care physician services to active duty soldiers through five primary care clinics, including the Presidio of Monterey U.S. Army Health Clinic in Presidio of Monterey, California. When space is available, active duty family members are also enrolled in these clinics. The enrollment for these clinics is as follows:

<i>Clinic</i>	<i>Location</i>	<i>Driving Distance from Madigan</i>	<i>Enrollees¹</i>
Madigan Clinic	Joint Base Lewis McChord	-	57,133
Nisqually Clinic	Joint Base Lewis McChord	1.4 miles	22,739
Okubo Clinic	Joint Base Lewis McChord	4.6 miles	12,394
McChord Clinic	Joint Base Lewis McChord	5.2 miles	7,598
Presidio Clinic	Presidio, California	866 miles	6,321
TOTAL			112,506

Source: Madigan Army Medical Center

Currently, there is limited capacity to provide primary care services to family members and retirees in the Madigan clinics. As such, most family members and retirees receive primary care management

¹ Enrollees as of October 2009.

through a TRICARE network provider.² However, Madigan does have adequate capacity in its specialty care clinics in the event patients require referral from primary care physicians—whether or not referred from a DoD/Madigan clinic or network provider. The following medical specialty clinics are available at Madigan:

Allergy/Immunology	Nephrology
Cardiology	Pediatrics
Dermatology	Pulmonary Disease/Critical Care
Endocrinology	Psychiatry
Gastroenterology	Psychology
Hematology/Medical Oncology	Rheumatology
Infectious Disease	Social Work
Internal Medicine	Substance Abuse Rehabilitation
Nephrology	

Source: Madigan Army Medical Center

Madigan currently operates 204 beds, but has the capacity to expand to 286 beds during war time. In federal fiscal year 2009 these beds operated at nearly 56 percent occupancy. Since 2007, the average daily census at Madigan has remained relatively stable. This is likely due to continued deployments from the base. The medical center also operates 14 operating rooms; full service emergency department, laboratory and pharmacy; and a comprehensive imaging department. Please see more information regarding services at Madigan in the sections below.

TRICARE

Medical and health services for active duty military service members, activated guard and reserve members, retired members of the uniformed services, their families and survivors are covered under the TRICARE system. Where there are gaps in military services, TRICARE supplements those resources with a network of civilian health care providers. TRICARE’s objective is to provide access to high quality medical and health services while maintaining the capability to support military operations.

There are three TRICARE coverage plans: TRICARE Prime, TRICARE Extra and TRICARE Standard. All active duty, guard and reserve service members are automatically enrolled in TRICARE Prime. Military dependants, however, may choose different coverage options to meet their needs. The majority of

² Please note that retirees over 65 are shifted to a Medicare primary care provider. Ideally this person was the retiree’s TRICARE primary care provider.

dependents choose to enroll in TRICARE Prime³, but others may enroll in TRICARE Extra⁴, TRICARE Standard⁵, or may choose not to enroll in TRICARE at all.

TRICARE Prime enrollees, who make up the majority of TRICARE enrollees, utilize MTFs⁶ as their principal sources of health care. Madigan and the military providers who serve at these facilities provide the medical homes for most TRICARE Prime enrollees in the region. However, due to staffing and resource concerns across DoD facilities, all TRICARE patients are seen in priority order, and the number of TRICARE Prime patients who are assigned to Network providers due to capacity constraints at the MTFs has been steadily growing. As defined by DoD, prioritization is as follows:

1. Active duty service members.
2. Active duty family members who are enrolled in TRICARE Prime (survivors of military sponsors who died on active duty and are enrolled in TRICARE Prime are included in this priority group during the time period they are eligible). Active duty family members who are enrolled in TRICARE Plus fall into this category for primary care appointments only.
3. Retirees, their family members, and survivors who are enrolled in TRICARE Prime.
4. Active duty family members who are NOT enrolled in TRICARE Prime (survivors of military sponsors who died on active duty who are not enrolled in TRICARE Prime are in this priority group). These beneficiaries may enroll in the TRICARE Plus Program to receive primary care within an MTF.
5. Retirees, their family members and survivors who are not enrolled in TRICARE Prime. These beneficiaries may enroll in TRICARE Plus.
6. All other eligible persons.

All active duty service members are assigned to a primary care unit on base. When they select TRICARE Prime as their health care option, active duty family members, military retirees, and retiree family members are also assigned to a primary care manager on base when capacity exists. If there is not enough capacity to treat these patients at a MTF, they are referred to a community physician for primary care management. Active duty family members, retirees and retiree family members who chose not to enroll in TRICARE Prime may seek care from community resources through the TRICARE Standard option.

Madigan also provides medical and surgical physician specialty services. If an appointment is not available for a specialty service at a DoD facility (because physicians have full patient loads or the specialty service does not exist at the MTF), the referral is forwarded to the regional TRICARE Managed Care Support Contractor. TriWest is the contractor for the JBLM region. Upon receiving a referral,

³ TRICARE Prime is a managed care option offering the most affordable and comprehensive coverage. Active duty service members and activated Guard or Reserve members must enroll in TRICARE Prime. All other eligible beneficiaries have the option to enroll or use TRICARE Standard and Extra.

⁴ TRICARE Extra is a preferred provider option. TRICARE Extra beneficiaries get their health care services from network providers. Please see <http://www.military.com/benefits/tricare> for more information.

⁵ TRICARE Standard is a fee-for-service option. Please see <http://www.military.com/benefits/tricare> for more information.

⁶ Military treatment facilities are medical centers administered by the Department of Defense.

TriWest provides the beneficiary with the name, number, and authorization for care with a PRIME network provider in the civilian community. TRICARE Access Standards specify that specialty care be provided within a 60-minute drive-time of the patient's home and within 28 days of the initial referral. Beneficiaries are only reimbursed for travel if they must travel over 100 miles for services. However, undue financial burdens often result for some patients traveling within the region for care.

In short, through the TRICARE system, military personnel and their families rely heavily on both military and civilian providers. When military services are not available, community civilian services are necessary to support the deployment readiness of active duty, reserve and guard service members by directly providing care to service members and serving the health care needs of their dependents. As a result, shortages in services provided in the civilian community have a substantial impact on military families.

In the JBLM region there are currently 148,851 eligible TRICARE beneficiaries⁷ in Pierce and Thurston Counties, approximately 14% of the two-county population. Since over 70% of soldiers live off-base, many of these beneficiaries are scattered throughout the area. Madigan reports a shortage of TRICARE network providers in some key municipalities. Specifically, in the high growth areas of Yelm and Puyallup few primary care providers that accept TRICARE. Because these areas are over 30 minutes drive time from the base, present standards indicate that these patients should be able to access services within their communities; however, this shortage of TRICARE network providers means many patients have difficulty accessing services in a timely manner. Similarly, there is a shortage of TRICARE primary care providers in Olympia, where many families and retirees live. Please see the Health Care Providers section below for more information on this topic.

TRICARE reimbursement rates are linked to Medicare maximum allowable charges; however, regional contractors have the prerogative to negotiate lower payment rates. As such, TRICARE network providers are typically reimbursed at rates lower than Medicare and in some cases lower than Medicaid once negotiated discounts are applied. As a result, physicians may limit or decline participation in the TRICARE network. However, TriWest has made every effort to counterbalance low reimbursement rates by improving the speed of reimbursement to improve providers' cash flow. Clean claims are generally paid in less than 30 days if filed manually and within 10 days if filed electronically.

Health Care Providers⁸

Madigan is the first resource for the health care needs of active duty soldiers, active duty family members, retirees and retiree family members. Madigan is staffed by 560 physicians and physician

⁷ TRICARE beneficiaries include active duty military, active duty military dependents, retirees and dependents of retirees.

⁸ Health care providers include physicians and physician extenders.

extenders,⁹ who provided 982,010 encounters in 2009. Their relative productivity (compared to a benchmark (MGMA) civilian provider) ranged from 29% for behavioral health providers to 65-114% for medical providers. These data are probably underestimated since they do not account for part-time providers or deployments. Moreover, lower averages (compared to MGMA) likely reflect the severity of cases encountered by Madigan providers, resulting in longer encounter times per patient, and the medical education responsibilities of Madigan providers.

<i>Specialty</i>	<i>Current Madigan Providers*</i>	<i>2009 Madigan Encounters*</i>	<i>Visits per Madigan Provider</i>	<i>Visits per Civilian Provider**</i>	<i>Madigan Visits/ Civilian Visits</i>
Primary Care	230	551,327	2,397	3,694	65%
Medical Specialists	82	200,114	2,440	2,146	114%
Surgical Specialists	65	128,872	1,983	2,543	78%
Behavioral Health	183	101,697	556	1,888	29%
Grand Total	560	982,010			

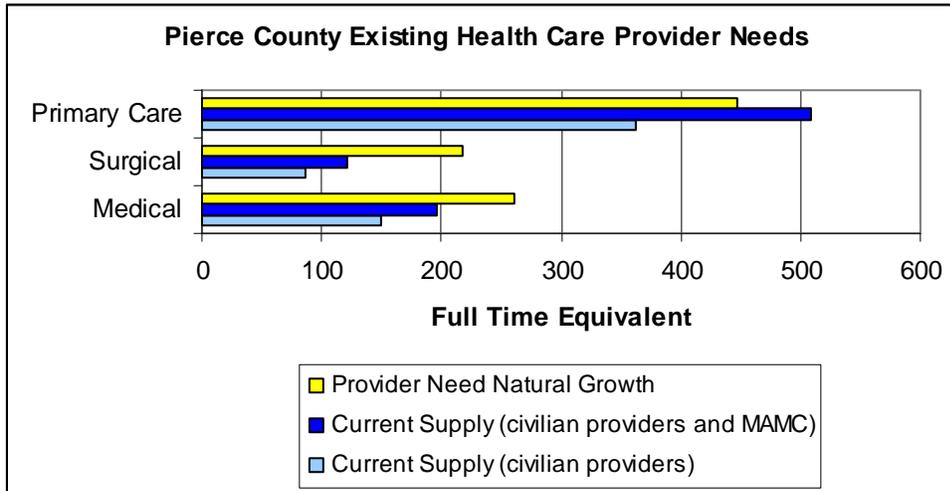
*Source: Madigan Army Medical Center Internal Data, provided May 2010. This table assumes that each provider is equivalent to one FTE.

**Source: MGMA visits per specialty weighted to reflect the specialist mix at Madigan.

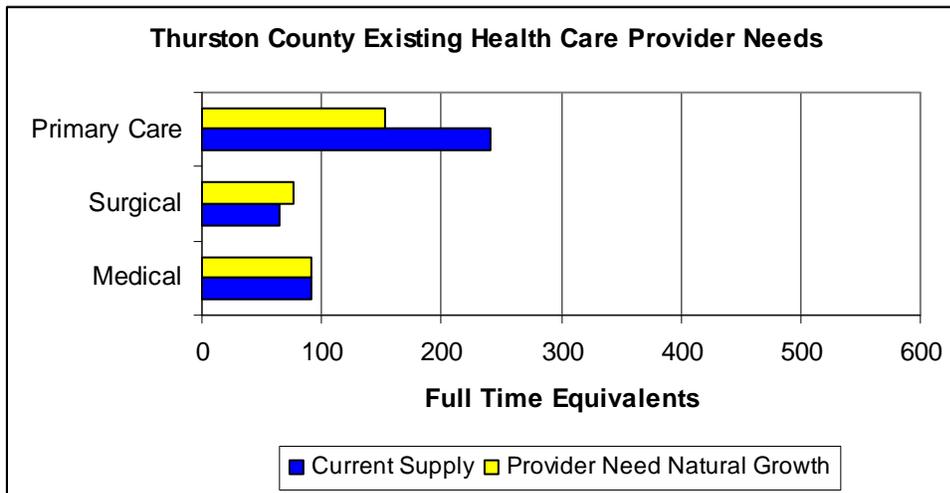
If a provider or service is not available at Madigan, patients are referred to a civilian provider. In Pierce County there are approximately 360 primary care, 150 medical specialty and 100 surgical specialty civilian full time equivalent providers as shown below. Madigan has approximately 150 primary care, 50 medical specialty and 40 surgical specialty full time equivalent providers.¹⁰ Assuming no material growth occurs through 2015, Pierce County residents (including military families) will support a need for additional surgeons and medical specialists. Although analyses show no need for primary care providers, the substantial number of family practice providers obscures the significant need for Ob/Gyn and pediatrics providers (approximately 30 and 80, respectively).

⁹ For the purposes of this report physician extenders include physicians assistants, nurse practitioners, psychologists, social workers, behavioral science officers and nurse anesthetists,

¹⁰ Please note that Madigan providers are assumed to represent less than one full time equivalent based on their additional military responsibilities.

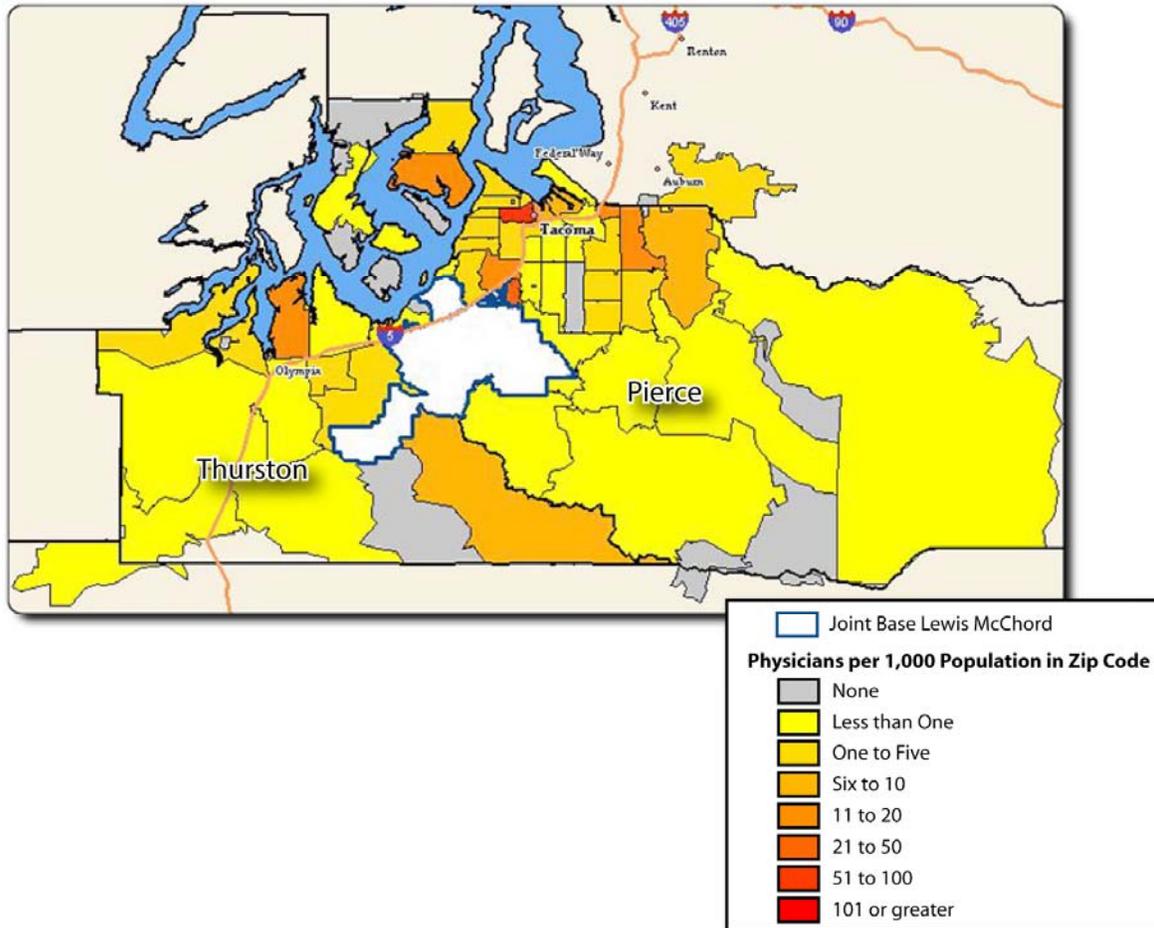


Thurston County is home to approximately 240 primary care, 90 medical specialty and 60 surgical specialty full time equivalent civilian providers. Currently, no military providers practice in Thurston County. As shown below, the greatest health care provider need in Thurston County is for surgeons, especially orthopedic surgeons and gynecologic surgeons.



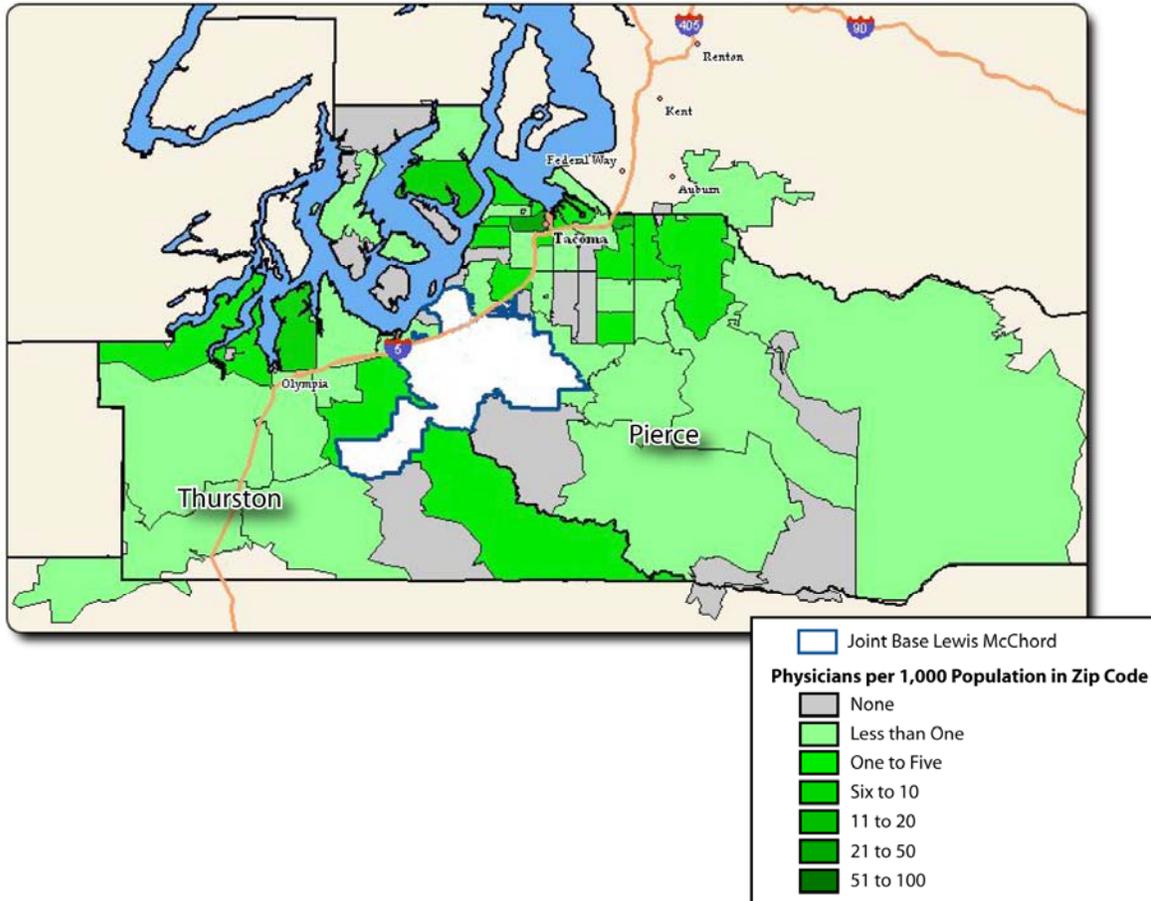
There are several caveats to the above tables. First, the HPS Physician Demand Model does not account for the impact of National Health Reform efforts. As more residents of the region gain access to health insurance the demand for providers is expected to increase; therefore, the need shown in the tables above will likely be understated. For example, one health care system estimates an additional 60-70 primary care providers will be needed in Pierce County alone. Second, the numbers do not equate to access, which depends upon whether the civilian providers are in the TRICARE network and are located in the communities where beneficiaries live. TRICARE network providers are unevenly located throughout Pierce and Thurston County.

All Providers per 1,000 Population



The TRICARE primary care physician shortage is even more pronounced in areas surrounding the base as shown in the map on the following page. Of note, three communities with several military families near JBLM—Roy to the southeast, Lacey to the west and Rainier to the southwest—have substantial shortages of TRICARE primary care physicians.

Primary Care Providers per 1,000 Population



These shortages will likely be exacerbated by growth in the JBLM population.

Oral Health

Providers also note that there is an existing shortage of dentists in the region, resulting in significant access issues for dental services. There are dental shortages in the regions surrounding JBLM that mirror the shortage of primary care providers. In addition, there is a shortage of dentists for TRICARE and low income patients. Unfortunately, the available data do not allow existing shortages to be quantified.

Although active duty soldiers receive dental care on base, their families must seek care in the community. As such, the shortage of providers that will accept TRICARE dental coverage significantly

impacts these family members' ability to access dental services. Further, the co-pays for dental services may be high and cost prohibitive; as a result, military families in the JBLM region often forgo regular dental check ups. Consequently, many people in the region use the emergency department for dental emergencies.

Military families may not be aware of the free treatment and prevention options available in the region, particularly for children. For example, the Lindquist Dental Clinic for Children in South Tacoma provides dental care to children with TRICARE and will waive the co-pay for patients who are financially eligible. In 2009, the clinic provided care to 506 military children, but has capacity to serve many others. Similar practices are available for military spouses.

Increased population will result in a minimal need for additional dentists in Pierce County. However, the isolated military population growth in the region from 2009 to 2015 is expected to result in the need for 9 additional dentists in Pierce County. These dentists must accept TRICARE in order to fully meet this need.

Behavioral Health

Improving the behavioral health system¹¹ was universally identified as the top priority for the JBLM region by medical and social services providers. The existing system is not sufficient to meet the needs of the current population and is not expected to be able to support regional population growth and the return of three Stryker brigades to Joint Base Lewis McChord over the summer of 2010. Currently, the regional population has higher than average mental health needs due not only to the presence of the base, but also the location of Western State Hospital in Lakewood and the general characteristics of the regional civilian population. These needs are outlined below.

Military families face unique pressures above and beyond those challenges faced by the civilian population, which increase their need to access behavioral health services. In particular, as Operations Iraqi and Enduring Freedom (OIF and OEF) continue abroad, the behavioral health needs of active duty soldiers, reservists and their families are becoming more acute. Despite substantial efforts by the Department of Defense, the number of army suicides continues to increase.¹² In addition, Madigan providers report that of the soldiers seeking behavioral health services, the acuity of the diagnoses is increasing. Pierce and Thurston County behavioral health providers also report increases in the number of family members accessing services while their service member is deployed.

¹¹ Behavioral health encompasses mental health and substance abuse prevention and treatment.

¹² Suicides Still Big Problem, Available at <http://www.honoluluadvertiser.com/apps/pbcs.dll/article?AID=20102280368>

As outlined in a 2007 report by the American Psychological Association (APA),¹³ each member of a military family (including the deployed service member, children, significant others and spouses left at home) experiences significant stress during deployments. Families face a series of emotional changes during the pre-deployment, deployment and reunion processes. Spouses and significant others left behind often experience increased responsibility for every day tasks, such as child care and household maintenance, as well as feelings of sadness, anxiety and loneliness. For many this can be an overwhelming time period, especially considering that many military families are located away from their extended family support networks. Such stressful conditions put these families at high risk for mental health and substance abuse problems.

It has been reported that as many as one quarter of all returning service members struggle with psychological injuries. According to the APA, a majority of those deployed to Iraq and Afghanistan report exposure to multiple life-changing stressors and have difficulty re-acclimating into civilian life. One such stressor, deployment, may occur more than once. OEF and OIF military units have routinely undergone second, third and fourth redeployments into combat zones. Families not only face the stress of multiple deployments, but also the anxiety associated with uncertainty about possible subsequent redeployments. As a result of the unique characteristics of military families, the need for behavioral health support in military communities, such as the JBLM region, is unquestionable and essential to deployment readiness.

Further, the civilian population in Pierce and Thurston Counties has significant mental health issues. The presence of Western State Hospital in the region results in a greater number of persons with severe and persistent behavioral health issues residing in the area. Unless a patient has family support in another area of the state, many patients choose to stay near Western State Hospital upon discharge in order to access community services. This places a significant strain on community resources and limits the availability of services for patients with lower acuity diagnoses. In addition, the areas near the base appear to attract a younger, transient population. This segment of the population lacks roots and stability, and therefore, is often at risk for mental health and substance abuse issues.

Unfortunately, although there is a great need for behavioral health services in the region, the behavioral health systems in Pierce and Thurston Counties are in crisis. According to interviews conducted in the region, the major issues include:

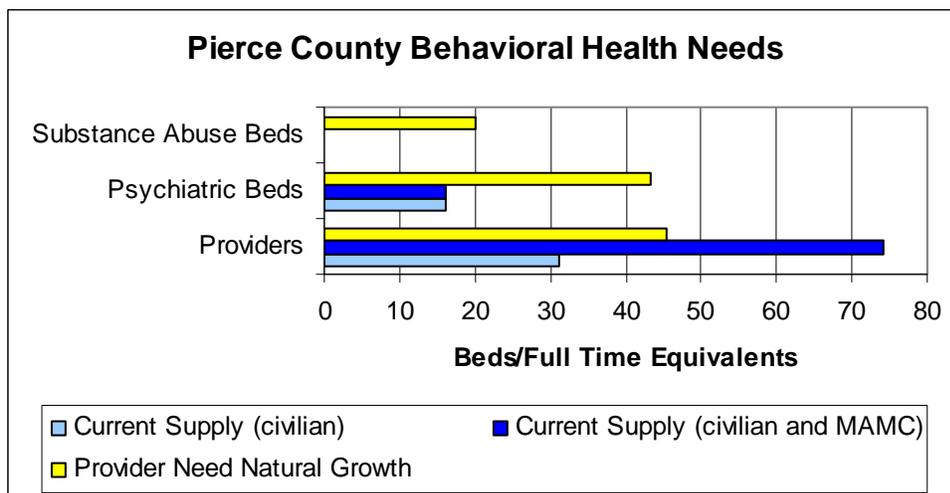
¹³ The Psychological Needs of the U.S. Military Service Members and Their Families: A Preliminary Report, Available at <http://www.apa.org/releases/MilitaryDeploymentTaskForceReport.pdf>.

- The supply of behavioral health providers (psychiatrists and mid-level providers) is insufficient,
- The supply of adult inpatient mental health beds for voluntary admissions is limited,
- There are no beds available within a five county radius for children and adolescents requiring inpatient care,
- Funding for behavioral health services in Washington State is inadequate, and
- Coordination between providers, particularly among Madigan and civilians, is lacking.

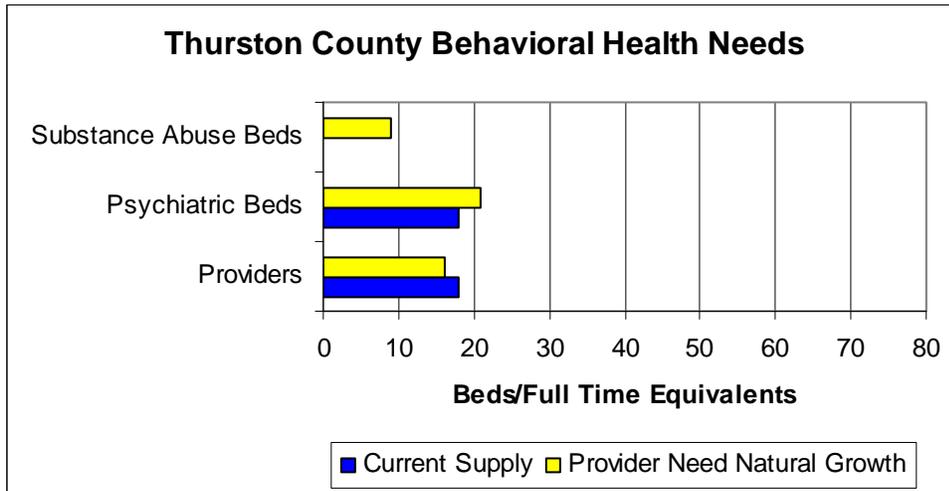
Many behavioral health issues are not identified as such but are manifested when they result in other consequences. For example, family stress and dysfunction may lead to academic performance or discipline problems in children; emotional or financial stress, mood disorders, and poor coping skills may lead to marital conflicts, divorce, or domestic violence in couples; stress, self-medication for mood disorders, and substance abuse may lead to arrest on drug, alcohol, or assault charges. The stigma of mental illness further leads to undercounting of behavioral health problems.

As shown below, there are currently approximately 30 civilian full time equivalent behavioral health providers and 40 Madigan full time equivalent behavioral health providers in Pierce County. Based on the civilian supply of providers alone, without military population growth there will be a need for approximately 15 additional full time equivalent providers in Pierce County in 2015. Many civilian providers report difficulty recruiting behavioral health providers because the pay scale is much higher at Madigan. In the future, there is a need to assist civilian providers with recruitment efforts.

In addition to provider needs, there will be a substantial need for additional inpatient psychiatric and substance abuse bed capacity.



There are approximately 20 full time equivalent behavioral health providers in Thurston County, which appears to be sufficient through 2015 based on normal population growth. However, Thurston County will have a need for additional inpatient psychiatric and substance abuse beds.



The National Alliance on Mental Illness Washington Chapter has included “increasing the availability of psychiatric inpatient facilities” as one of the organization’s 2010 legislative priorities citing a critical shortage of both voluntary and involuntary treatment facilities at all levels of service throughout the State of Washington. Currently, the only adult inpatient services for voluntary patients in the JBLM region are located at St. Joseph Medical Center in Pierce County and Providence St. Peter Medical Center in Thurston County¹⁴. These units have 16 and 18 beds, respectively. In calendar year 2009, the unit at St. Joseph Medical Center operated at 83.4 percent occupancy. Although it has been approved to expand its unit to 23 beds, the Medical Center anticipates that demand for these services will continue to be high. Involuntary adult patients are admitted to Western State Hospital in Tacoma. Crisis units are provided in both counties by Optum Health Pierce RSN and the Thurston-Mason RSN. There is no inpatient mental health unit located on the base. It should be noted that the data available is not sufficient to determine the need for adolescent psychiatric beds. However, there is a clear and present need to develop these services locally, particularly as the behavioral health needs of military children increase over multiple deployments.

The lack of resources to provide behavioral health services is ultimately the result of insufficient funding from federal, state, county and local sources. Reimbursement for both facilities and providers is universally regarded as incredibly low and creates a disincentive to provide services at all. In addition, the economic climate has resulted in cuts to all governmental budgets. In Pierce County, Greater Lakes Mental Health Care alone experienced over \$2 million in funding cuts. County wide cuts were significantly higher. As such, public providers are now receiving less money to support services and have been forced to cut services and personnel.

Another significant concern for behavioral health providers is the current lack of coordination between military and civilian providers, as well as among medical, behavioral, social service and educational providers. Presently, Madigan has limited capacity to serve military dependents in its behavioral health clinics. As a result, many military family members are referred to mental health and substance abuse

¹⁴ Providence St. Peter Medical Center has not provided data at this time.

services in the community. In addition, many active duty service members choose to seek services in the community for privacy reasons. The military relies on community providers to help support its services; however, military and non-military providers generally operate in “silos” without coordination. Both military and civilian providers in the region acknowledge that providers need to better understand the services available in other organizations. This knowledge would allow providers to ensure patients are accessing the most appropriate services available and are transitioned appropriately between providers as necessary. Currently, many military referrals never make it to the network provider. Better up front coordination will also allow the community providers to work with the military provider to remove access barriers, such as transportation for the patient.

Community Health

Pierce and Thurston Counties are served by separate local public health jurisdictions: the Tacoma-Pierce County Health Department (TPCHD) and Thurston County Public Health & Social Services (TCPHSS), respectively. Regarding health care:

- Both TPCHD and TCPHSS no longer provide direct medical services but they help the public access medical and oral health services in the community.
- Both TPCHD and TCPHSS work closely with the health care systems, private medical providers, community clinics, social service providers, and schools to ensure delivery of appropriate services.
- TPCHD provides substance abuse treatment services and opiate replacement (methadone) therapy while these are provided by a private community provider in Thurston County.
- In Thurston and Mason Counties, publicly-funded mental health services (the Regional Support Network (RSN)) are administered by TCPHSS while in Pierce County they are administered by a private contractor.

Both TPCHD and TCPHSS provide many of the same public health services including community health assessment, environmental health, communicable disease surveillance, public health emergency planning, food safety, and chronic disease prevention. The emphasis is on population-based prevention to complement the individual medical treatment provided by health care providers. Prevention programs may target chronic diseases (eg, cardiovascular disease), maternal/child health (eg, prematurity and low-birth weight), and social outcomes (eg, early childhood learning, child abuse, violence).

The most significant chronic disease risk factors in Pierce and Thurston County residents are obesity, overweight, and smoking. In particular, smoking is often linked to the military population. Demographics, socialization, longstanding policies that discount cigarettes and encourage smoking, and the stresses of combat are contributors. Unfortunately, public health funding for tobacco prevention has been significantly cut due to budget pressures.

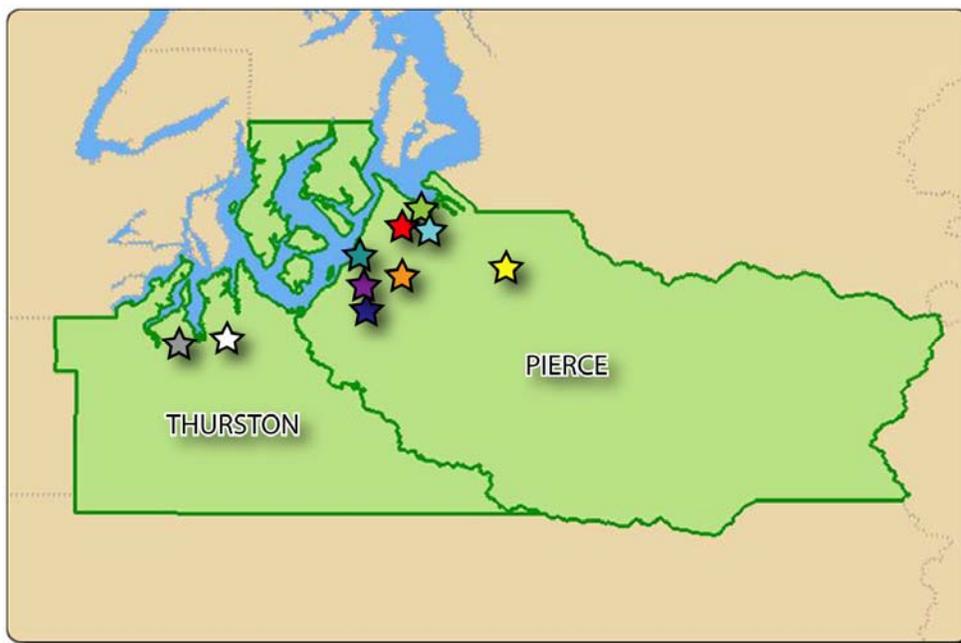
At JBLM, public health functions are performed by MAMC in coordination with TPCHD. For example, another significant health concern is the rates of chlamydia and gonorrhea, which are much greater in Pierce County than the State of Washington. MAMC and TPCHD collaborate in reporting cases, identifying sexual contacts, and ensuring treatment.

Both TPCHD and TCPHSS also coordinate activities with and access resources from the Washington Department of Health and the Centers for Disease Control and Prevention.

Following their review of the draft Existing Conditions Technical Memorandum, the Health Care Expert Panel suggested a review of the public health needs in Pierce and Thurston Counties be included in the Needs Assessment Technical Memorandum.

Inpatient Care

The JBLM region is served by eight community hospitals located in Pierce and Thurston Counties, as well as Madigan.¹⁵



- ★ Madigan Army Medical Center
- ★ Allenmore Hospital
- ★ Good Samaritan Hospital
- ★ St. Clare Hospital
- ★ Tacoma General Hospital
- ★ American Lake Veteran's Hospital
- ★ Capital Medical Center
- ★ Providence St. Peter Hospital
- ★ St. Joseph Medical Center
- ★ Western State Hospital

In 2009, these facilities had the following inpatient capacity:

¹⁵ See Department of Defense section above for more information regarding MADIGAN.

	Acute Care Beds	Patient Days	Occupancy
Good Samaritan Hospital	200	53,794	73.7%
Mary Bridge Children’s Hospital	72	15,596	59.3%
Tacoma General Hospital	391	81,748	57.3%
St. Clare Hospital	106	29,613	76.5%
St. Joseph Medical Center	249	79,934	88.0%
Allenmore Hospital	130	12,854	27.1%
Capital Medical Center	Unavailable	Unavailable	Unavailable
Providence St. Peter Medical Center	303	73,644	66.6%

Source: All hospital data provided by MultiCare and Franciscan Health System

Inpatient rehabilitation services are provided at Good Samaritan Hospital, St. Joseph Medical Center and Providence St. Peter Medical Center. The capacity of these units is as follows:

	Rehabilitation Beds	Patient Days	Occupancy
Good Samaritan Hospital	25	6,383	70.0%
St. Joseph Medical Center	34	9,500	76.6%
Providence St. Peter Medical Center	19	6,935	70.1%

Source: MultiCare, Franciscan Health System and Providence Health and Services

Based on natural population growth alone, the existing acute care and rehabilitation bed supply in both counties is sufficient to meet the demands of the population.

Outpatient Services

In addition to inpatient and physician services, ambulatory surgery, urgent care and outpatient rehabilitation are available at the following locations:

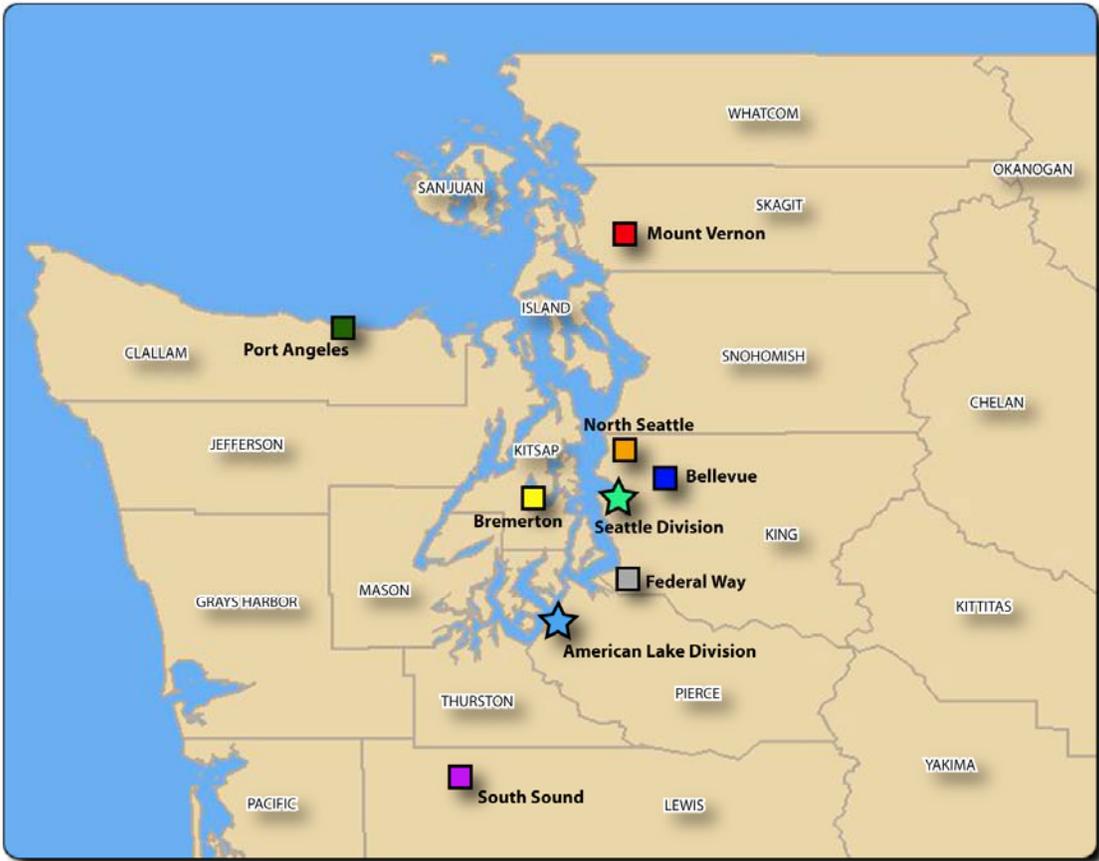
Facility Name	City
Ambulatory Surgery	
Gig Harbor Ambulatory Surgery Center (Tacoma Orthopaedic Surgeons)	Gig Harbor
MultiCare Ambulatory Surgery Center	Gig Harbor
Lakewood Surgery Center	Lakewood
St. Clare Hospital	Lakewood
Good Samaritan Hospital	Puyallup

Good Samaritan Surgery Center	Puyallup
Puyallup Ambulatory Surgery Center	Puyallup
Rainier Orthopedic Institute	Puyallup
Allenmore Hospital	Tacoma
Mary Bridge Children's Hospital	Tacoma
St. Joseph Medical Center	Tacoma
Tacoma Ambulatory Surgery Center (Tacoma Orthopaedic Surgeons)	Tacoma
Tacoma General Hospital	Tacoma
Urgent Care	
Franciscan Medical Group Pt. Fosdick Urgent Care	Gig Harbor
Gig Harbor MultiCare Clinic	Gig Harbor
Express Urgent Care	Lacey
Pacific Walk-In Clinic	Lacey
MultiCare Lakewood Urgent Care Center	Lakewood
Group Health Cooperative Olympia Medical Center	Olympia
Urgent Care of Olympia	Olympia
Westcare Clinic	Olympia
Franciscan Medical Group Canyon Road	Puyallup
Group Health Cooperative Tacoma Medical Center	Tacoma
Urgent Care South	Tumwater
MultiCare University Place Urgent Care Center	University Place
MultiCare Spanaway Urgent Care Center	Spanaway
Outpatient Rehabilitation	
Good Samaritan Hospital	Puyallup
Good Samaritan Children's Therapy Unit	Puyallup

As noted in the health care provider section, the greatest concern for outpatient facilities is the willingness of providers to accept TRICARE.

Veteran’s Affairs

The JBLM region is served by VA Puget Sound, an integrated health system which provides health services at two VA Division Medical Centers and six Community Based Outpatient Clinics (CBOCs). VA Puget Sound is the largest health system in Veteran’s Integrated Service Network (VISN) 20, treating over 67,000 veterans in fiscal year 2009.



☆ Medical Center □ Existing Outpatient Clinic

The sites of care included in the map above are supported by 211 physicians in the following specialties:

<i>Specialty</i>	<i>Number of Providers</i>
Integrated Gerontology	14
Mental Health	44
Primary Care*	87
Rehabilitation	11
Spinal Cord Injury	4
Surgery	46

Source: VA Puget Sound
 Please note data regarding physician site of practice will be available in the needs assessment.
 *Includes specialty clinics, ER, inpatient

Please note the table above presents the total number of providers and not full time equivalents. Many of these physicians are not full time clinical providers and a portion of their time is dedicated to research or training endeavors. Also, please note that these providers were not included in the health care provider section above as they serve a defined, closed population.

The majority of inpatient care for the region is provided at the Seattle Division Hospital, which provides treatment to acute care, rehabilitation and psychiatry patients in 203 inpatient beds.

<i>Specialty</i>	<i>Beds</i>
Acute Care	151
Psychiatry	40
Rehabilitation	12

Source: VA Puget Sound

The American Lake Division Medical Center provides inpatient acute care services through a 15 bed internal medicine unit located at Madigan. The facility at American Lake provides primarily outpatient primary care, in addition to inpatient and outpatient psychiatry care. American Lake has a 30 bed inpatient psychiatric unit. In addition, American Lake provides a 30 bed Psychiatric Residential Rehabilitation and Treatment Program (PRRTP).

The two medical centers and each of the Puget Sound CBOCs provided the following outpatient visits in fiscal year 2009:

<i>Site of Care</i>	<i>Visits</i>
Seattle	470,869
American Lake	292,532
Valor CBOC's*	21,322
Bremerton CBOC	11,959
Mt. Vernon CBOC	8,747
Port Angeles CBOC	5,006

Source: VA Puget Sound

*Includes all King County CBOC's

In order of magnitude, the majority of outpatient visits fell into the following specialty categories:

- Primary Care
- Mental Health (General Psychiatry/Post Traumatic Stress Disorder)
- Combined Eye Care
- Dental
- Dermatology
- Audiology

Continuing to provide and expand mental health services at these facilities is a priority for VA Puget Sound. Mental health services are provided at each CBOC in the region, as well as in the Seattle Emergency Department and Urgent Care. The VA is also expanding its suicide prevention efforts throughout its service sites. VA Puget Sound recognizes that the behavioral health needs of veterans are becoming more complex and is continuing to evaluate expansion options as they become necessary. In addition, the VA recognizes a need for a continuum of behavioral health services in the community to best meet the needs of military and civilian residents. As such, outpatient and inpatient services must be coordinated and services should be available for patients at all acuity levels. In particular, as behavioral health needs become more acute, the absence of involuntary inpatient care in the region will become a significant burden.

Aside from mental health, the greatest physician needs for the VA Puget Sound are orthopedics and neurosurgery. Often, neurosurgery patients must be sent out of the region for surgery, but can return to one of the local VA centers for rehabilitation. The VA also reports that VA physical therapists and occupational therapists are often at capacity and they must contract for these services with civilian providers. In the near future, the VA expects to complete an extensive expansion of primary care services and will likely also expand rehabilitation and hospice services. Lastly, dental services at the VA are highly utilized by most veterans and as the local veteran community expands, there will be greater needs for dentists

APPENDIX 1

Health Care Interviews

Franciscan Health System
Greater Lakes Mental Health Care
Madigan Army Medical Center
Madigan Army Medical Center Physicians
MultiCare Health System
Regional Dentists
Tacoma-Pierce County Health Department
Thurston County Public Health and Social Services
TriWest
VA Puget Sound Health System



HEALTH CARE

Needs Assessment Technical Memorandum



Date: July 1, 2010
To: Health Care Expert Panel
From: Craig Savage and Beth Weidner, Health Planning Source, Inc.
Re: Sector Needs Assessment of the JBLM Growth Coordination Plan

Introduction

This technical memorandum is the second of in a series of three health care studies prepared as part of the development of the Joint Base Lewis-McChord (JBLM) Growth Coordination Plan to be completed December 2010. The first study, the Health Care Existing Conditions Technical Memorandum, was issued on April 5, 2010 for the Health Care Expert Panel, Growth Coordination Committee, and Regional Steering Committee to review and provide the consultant team with feedback. The stakeholders engaged in this process had the following input on the Health Care Existing Conditions Technical Memo:

- Important to acknowledge that soldiers' families are affected by the military health system, not just soldiers themselves
- Requested more information regarding public health measures
- Need to note that the work of other expert panels will impact the health care needs of the region

This feedback is considered in the definition of needs and potential opportunities below.

Needs Assessment Methodology

Needs and opportunities were determined through a series of interviews with key health care providers, including leadership at Madigan Army Medical Center (Madigan) during February and March 2010 and a review of existing data through August 2010. Interviewees included members of the Health Care Expert Panel, as well as other regional health and related services providers recommended by the Panel members. Please see Appendix 1 of the Existing Conditions Technical Memorandum for a listing of all health care interviewees by organization. The quantitative information included in the report has been sourced appropriately below.

Needs Assessment

The needs assessment encompasses the major components of the health care system in Pierce and Thurston Counties, including services rendered at JBLM. The regional health care system is essential to deployment readiness. Not only must service members be healthy to begin their service overseas, but family members must also be mentally and physically healthy to support the needs of their soldier. Thus, the availability of medical, oral and behavioral health services for all beneficiaries in the region is critically important.

It should be noted that the issues—such as access, transportation, economic, educational, social, and environmental—identified by other expert panels also impact health care needs in the region. For example, economic factors may drive families to buy or rent homes in affordable areas that are less desirable or more remote. Less desirable urban areas may subject families to pollution, crime, and schools with poorer resources and achievement. More remote areas, such as the towns of Roy and Rainier mentioned in the Health Care Existing Conditions Technical Memorandum, have no medical, oral, and behavioral health services or public transportation to access those services. At the same time, low income families often experience more acute health care needs. Health care needs cannot be met in a vacuum, but rather must be met through multidisciplinary, regional collaboration dedicated to improving the lives of families throughout the area.

Please note that the potential opportunities and strategies are intended for discussion purposes. Final strategies and recommendations will be provided in the Final Growth Coordination Plan.

Behavioral Health Needs

The behavioral health system¹ was universally identified as the top priority for the JBLM region by medical and social services providers. There are significant needs for additional resources and collaboration between existing providers of behavioral health care. As noted in the Health Care Existing Conditions Technical Memorandum, interviews identified major issues that include:

¹ Behavioral health encompasses mental health and substance abuse prevention and treatment.

- The supply of behavioral health providers (psychiatrists and mid-level providers) is insufficient,
- The supply of adult inpatient mental health beds for voluntary admissions is limited,
- There are no beds available within a five county radius for children and adolescents requiring inpatient care,
- Funding for behavioral health services in Washington State is inadequate, and
- Coordination between providers, particularly between Madigan and civilian providers, is lacking.

Based on existing use rates, the growth of the JBLM population alone will not create a need for additional behavioral health providers or inpatient psychiatric/substance abuse beds. As noted in the Health Care Existing Conditions Technical Memorandum, Madigan behavioral health providers see only about one-third of the visits of comparable, benchmark (MGMA) civilian providers. However, we know that utilization of behavioral health services is increasing, particularly in the military population. Within the Army, 38% of Service Members report having psychological symptoms; and, it has become clear that these issues have been rising significantly among those with repeated deployments. It has been reported that as many as one quarter of all returning service members struggle with psychological injuries. According to the American Psychological Association (APA), a majority of those deployed to Iraq and Afghanistan report exposure to multiple life-changing stressors and have difficulty re-acclimating into civilian life. OEF and OIF military units have routinely undergone second, third and fourth redeployments into combat zones. Locally, Madigan providers report that of the soldiers seeking behavioral health services, the acuity of the diagnoses is increasing. Despite substantial efforts by the Department of Defense, the number of army suicides continues to increase.² In May 2010, the Pentagon released data showing that mental health disorders caused more hospitalizations in 2009 than any other diagnoses. As such, the population growth coupled with the continued deployments from JBLM will further stress a local and regional system that is already in crisis.

The impact extends to the soldier's family as well. As outlined in a 2007 report by the APA,³ each member of a military family (including the deployed service member, children, significant others and spouses left at home) experiences significant stress during deployments. Families face a series of emotional changes during the pre-deployment, deployment and reunion processes. Spouses and significant others left behind often experience increased responsibility for everyday tasks, such as child care and household maintenance, as well as feelings of sadness, anxiety and loneliness. For many this can be an overwhelming time period, especially considering that many military families are located away from their extended family support networks. Such stressful conditions put these families at high risk for mental health and substance abuse problems.

² Suicides Still Big Problem, Available at <http://www.honoluluadvertiser.com/apps/pbcs.dll/article?AID=20102280368>

³ The Psychological Needs of the U.S. Military Service Members and Their Families: A Preliminary Report, Available at <http://www.apa.org/releases/MilitaryDeploymentTaskForceReport.pdf>.

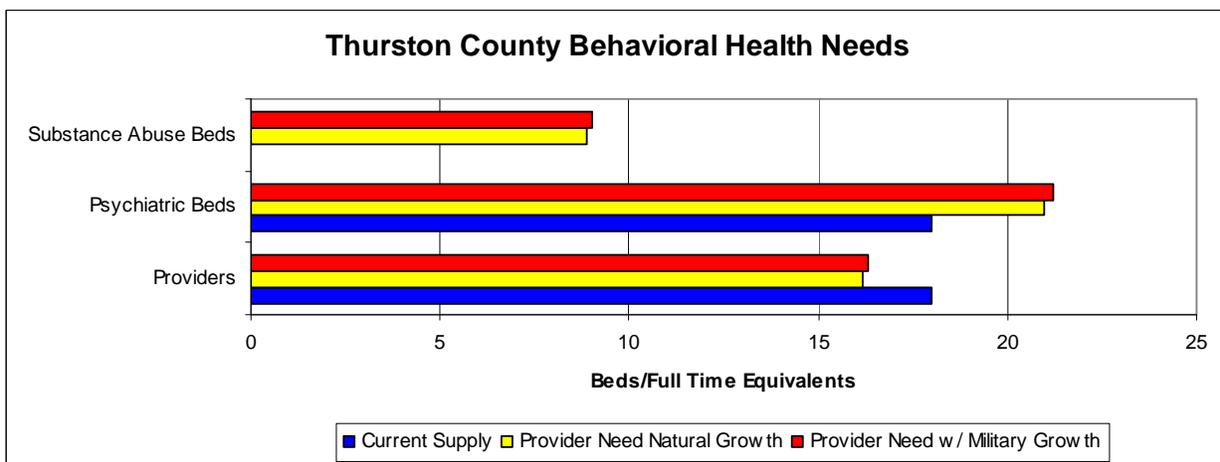
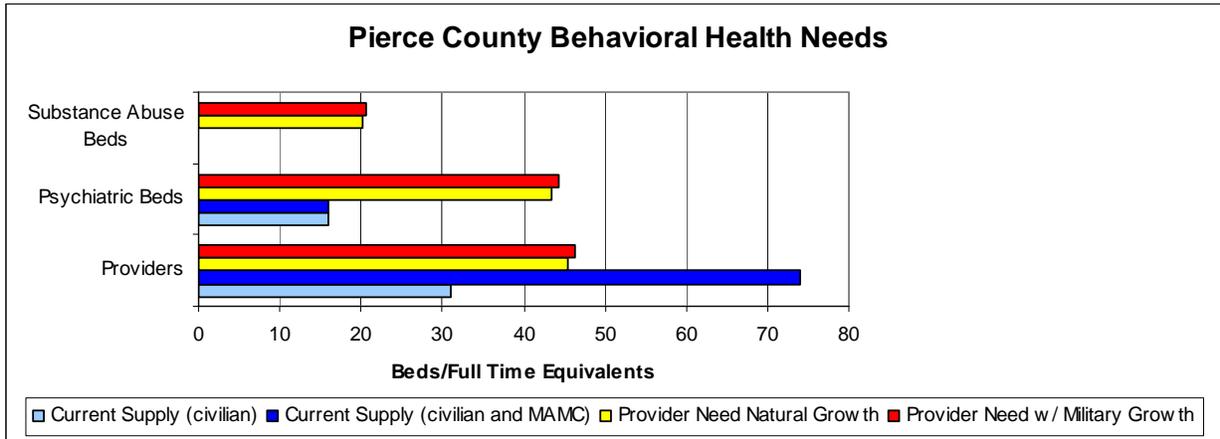
Many behavioral health issues are not identified as such but are manifested when they result in other consequences. For example, family stress and dysfunction may lead to academic performance or discipline problems in children; emotional or financial stress, mood disorders, and poor coping skills may lead to marital conflicts, divorce, or domestic violence in couples; stress, self-medication for mood disorders, and substance abuse may lead to arrest on drug, alcohol, and/or assault charges.

A significant number of active duty soldiers and their families utilize services in the community for a variety of reasons. Some fear the stigma or repercussions of seeking services on base, either at Madigan or one of the JBLM social services providers. Many, especially officers, find that the anonymity of seeking services in the community affords “easier” access. Given that over 70% of soldiers and families live off base they may simply find community-based services more accessible. School aged children are often referred to services at school. Between September 2007 and March 2010, Greater Lakes Mental Health Care served 416 military children through their contracts with the Clover Park schools. During the current school year, 38% of the military students served by these programs were assessed as having issues of significant severity at the time of referral, as compared to 29% of non-military children.

Greater Lakes Mental Health Care also served more than 500 military-related adults through its Counseling Services over the last year. Military services account for approximately 35% of their counseling work.

In addition, providers are currently concerned with the growth in Traumatic Brain Injury (TBI) cases resulting from combat during Operations Iraqi and Enduring Freedom. In many cases, providers report difficulty distinguishing between behavioral health issues and TBI. Further, many soldiers self report experiencing TBI when they are actually experiencing a behavioral health issue because of the stigma associated with the latter. A recent study found that people who are hospitalized for a traumatic brain injury face an almost eightfold higher risk of suffering from major depression. As such, the two diagnoses are often ultimately linked.

Military growth in the region is not expected to create new needs for behavioral health providers and beds. However, it is expected to further exacerbate the need for additional inpatient psychiatric and substance abuse beds as shown below.



It is also important to note that civilian providers have a substantially more difficult time recruiting behavioral health providers than Madigan. This is primarily a result of Madigan’s ability to pay higher salaries with reduced case loads per provider. Civilian providers will continue to play a significant role in the region’s behavioral health system; as such, there is a need to assist the region’s behavioral health organizations with recruitment efforts.

Another significant concern for behavioral health providers is the current lack of coordination between military and civilian providers as well as between medical, behavioral, social service and educational providers. Due to limited capacity, convenience, personal choice, or other reasons, many beneficiaries are receiving services in the community. However, military and non-military providers generally operate in “silos” without coordination. Both military and civilian providers in the region acknowledge that providers need to better understand the services available in other organizations. Providers also need to ensure clients are accessing the most appropriate services available and their care is properly “managed” between providers as necessary.

Potential Opportunities and Strategies

Improving the behavioral health system in Pierce and Thurston Counties presents a tremendous opportunity for the region. The greatest priority for behavioral health services is to ensure that all agencies— military and civilian—providing behavioral health services are working collaboratively, as well as coordinating with medical, social and educational organizations. The first step toward active collaboration is regular communication. This may be through a standing coalition that meets regularly or some other format. It is important that a representative from JBLM be present at these meetings to ensure a long term relationship with the community.

Since access, transportation, economic, educational, social, environmental, and other factors play roles in improving or exacerbating physical and behavioral health, they must be addressed. Comprehensive solutions that address multiple factors should be developed with other Regional Growth Plan expert panels. Partnerships and grant applications should be developed collectively with coalitions and umbrella organizations like United Way of Pierce County, United Way of Thurston County, the Lakewood Human Services Collaboration, and Educational Service District (ESD) 121 and 113.

Exemplary practices such as those developed by Greater Lakes Mental Health Care, the Military Child and Adolescent Center of Excellence at JBLM, the Center for Polytrauma at VA Puget Sound, or the Military Child Education Coalition should be identified. Dissemination strategies and policy changes should be pursued so that these services will be available for all beneficiaries regardless of place of residence or school district.

Providers also must work with the state to develop additional inpatient capacity in the region for voluntary patients. Pierce County, in particular, could support nearly 50 additional behavioral health inpatient beds.

Perhaps most important, the regional leaders should consider development of a more comprehensive study of the behavioral health needs surrounding JBLM. The scope of this study was limited, and as such, only introduces the behavioral health needs in the region. A future study should develop a comprehensive plan for improving the services provided in the region.

Physical Health Care Needs

Health care needs encompass ongoing preventive and primary care, chronic disease, acute care, and work-related disorders. Certain characteristics of soldiers make them more likely to have certain health care needs: they are often young, displaced from their usual social support system, limited in financial resources, and exposed to significant physical and emotional stress in their work. Young adults with families have reproductive health (including sexually transmitted diseases), pregnancy care, and pediatric care needs. As discussed below in the Community and Public Health Needs section, Pierce and Thurston County residents have significant chronic disease risk factors of obesity, overweight and smoking; soldiers often have higher rates of smoking. Location of providers, military or civilian, and participation in TRICARE are also important factors when seeking to access health services.

Department of Defense Health Services

As stated in the Health Care Existing Conditions Technical Memorandum, Department of Defense services in Pierce and Thurston Counties are provided largely by Madigan and its network of primary and specialty care clinics, as well as civilian providers that participate in the TRICARE network.⁴

Madigan currently has no additional capacity to treat families, dependents and retirees in its primary care clinics and some of its specialty care clinics. When Madigan clinics are full, TRICARE beneficiaries⁵ are referred to community physicians within the TRICARE contracted network. There are currently 148,851 eligible TRICARE beneficiaries⁶ in Pierce and Thurston County, and of those eligible for TRICARE benefits, 130,622 are enrolled with a civilian or military treatment facility (MTF)⁷ primary care provider. All other beneficiaries participate in TRICARE standard. As a result, TRICARE beneficiaries currently represent approximately 14 percent of the two-county population.

County	Total Beneficiaries*	Population**	% of Total Population
Pierce	120,333	813,610	14,8%
Thurston	28,518	249,800	11,4%

⁴ TRICARE is the health care program serving active duty service members, National Guard and Reserve members, retirees, their families, survivors and certain former spouses worldwide. As a major component of the Military Health System, TRICARE brings together the health care resources of the uniformed services and supplements them with networks of civilian health care professionals, institutions, pharmacies and suppliers to provide access to high-quality health care services while maintaining the capability to support military operations.

⁵ It is important to note that non-married partners of active duty military service members are not eligible for TRICARE benefits. Many of these partners are Medicaid beneficiaries or are uninsured.

⁶ TRICARE beneficiaries include active duty military, active duty military dependents, retirees and dependents of retirees.

⁷ Military treatment facilities are medical centers administered by DoD.

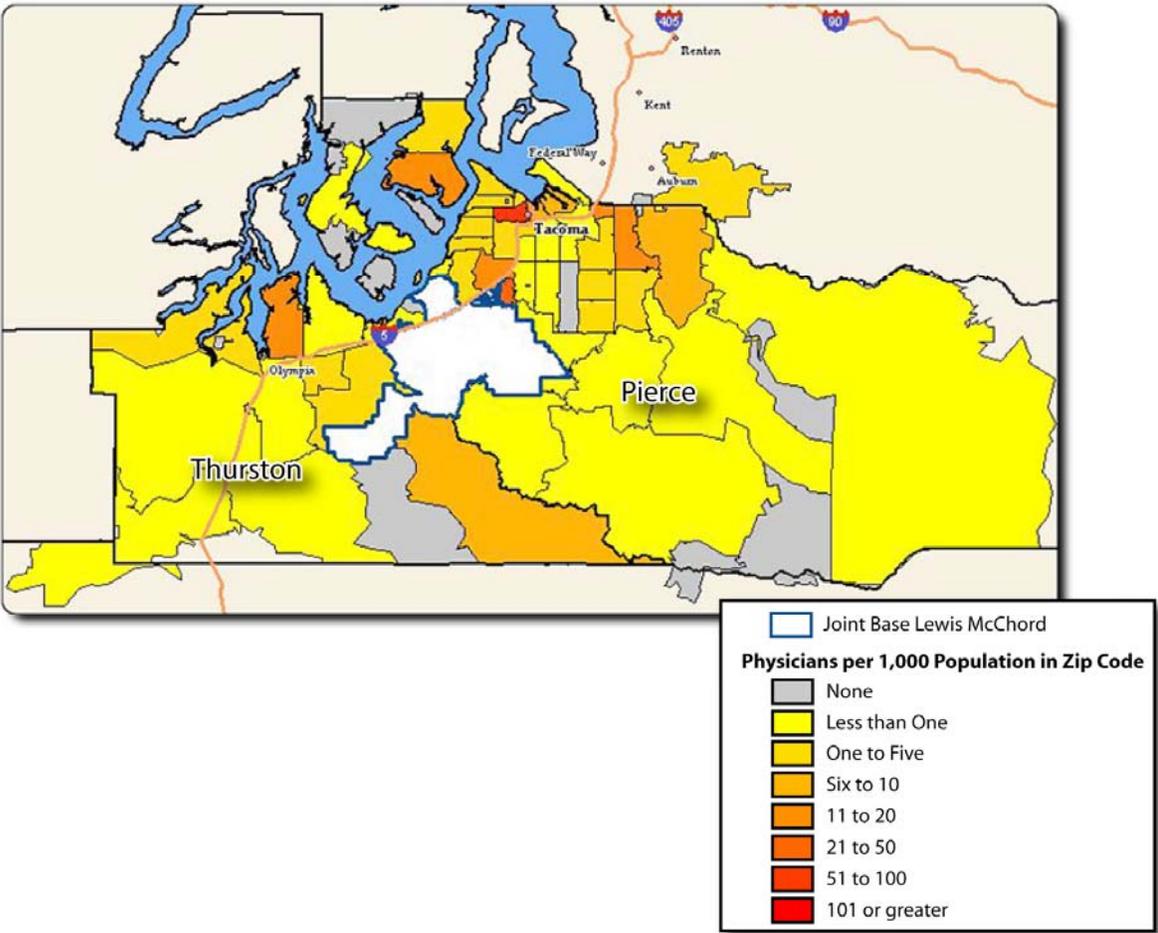
Grand Total	148,851	1,063,410	14.0%
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*Source: TriWest Healthcare Alliance

**Source: Washington State Office of Financial Management

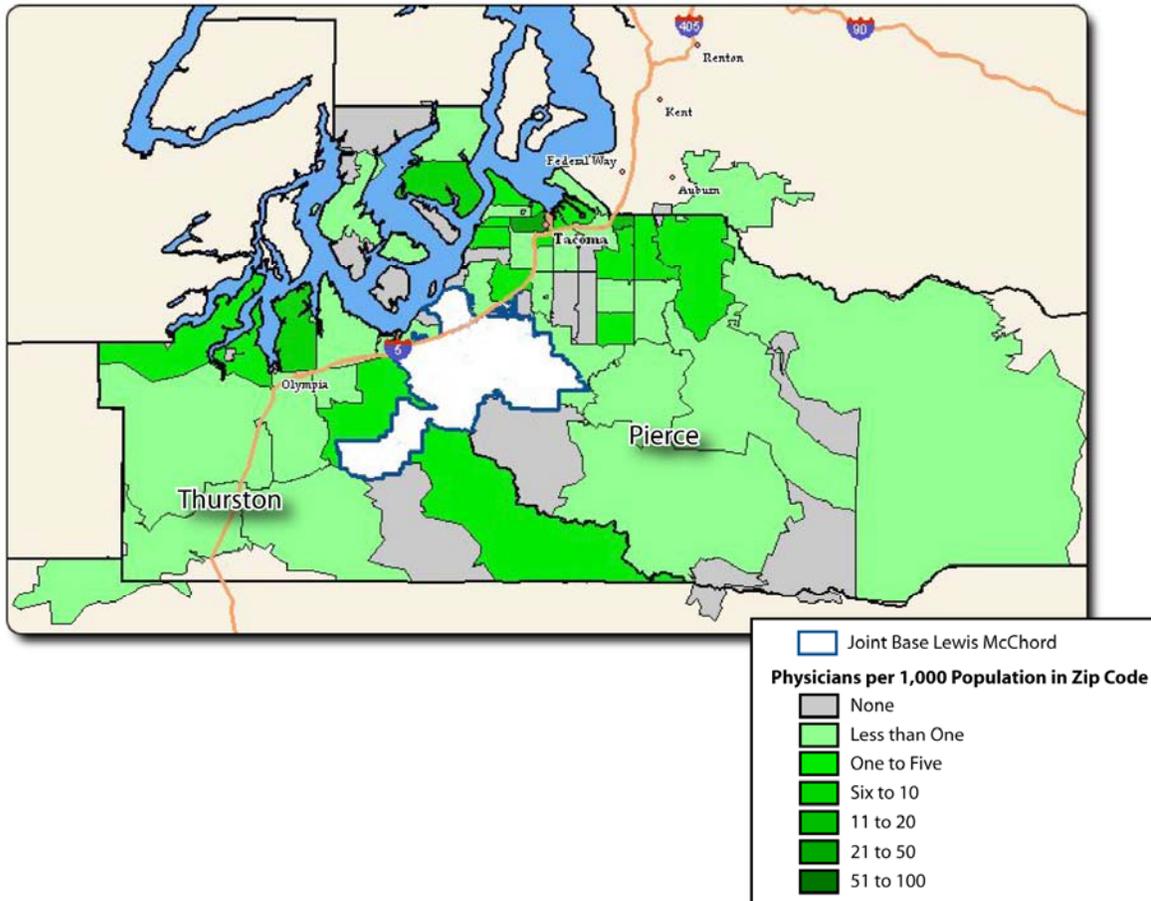
The following map, provided in the updated Health Care Existing Conditions Technical Memorandum, demonstrates the TRICARE network provider density in Pierce and Thurston Counties.

All Providers per 1,000 Population



In addition, the following map demonstrates the density of TRICARE primary care network providers.

Primary Care Providers per 1,000 Population



The maps above clearly demonstrate Madigan’s concerns regarding TRICARE network provider shortages in many areas surrounding the base. Some of these areas are over 30 minutes’ drive time from Madigan and standards stipulate that these patients be able to access services within their communities. However, the shortage of TRICARE network providers in these areas means many patients have trouble accessing services in a timely manner. In addition to these areas adjacent to the base, Olympia, where many military families and retirees reside, has a shortage of TRICARE primary care network providers. Although the provider density is higher in that area, the population is much denser. Further, it should be noted that the above map simply shows the number of physicians participating in the network, but does not indicate whether they are serving a full panel of TRICARE patients. There is clearly a need for additional TRICARE network providers in the region. . Please see the health care provider discussion below for additional information regarding the health care provider shortage in the region.

The shortage of TRICARE network providers is likely related to concerns about low reimbursement and a lengthy credentialing process. As described in the Health Care Existing Conditions Technical Memorandum, TRICARE reimbursement rates are linked to Medicare maximum allowable charges; however, regional contractors have the prerogative to negotiate lower payment rates. As such, TRICARE network providers are typically reimbursed at rates lower than Medicare and, in some cases, lower than Medicaid once negotiated discounts are applied. As a result, physicians may limit or decline participation in the TRICARE network. Efforts by TriWest to counter balance low rates with speed of reimbursement may not be persuading providers to participate. Restructuring the reimbursement rates will be needed to address the participating provider shortage.

In addition, the credentialing process can be overly cumbersome, especially for mental health providers, and is a deterrent for some providers. Simplified and streamlined credentialing will be needed.

Inpatient services for TRICARE beneficiaries are provided at Madigan on a priority and availability basis. Active duty service members have first priority, followed by family members and then retirees and their dependents. In addition, Madigan does not provide all specialty services. For services not provided at Madigan, beneficiaries are referred to community hospitals. Madigan currently staffs 204 inpatient beds⁸, but has the ability to expand capacity to 286 beds. In 2009, the inpatient beds at Madigan operated at 69 percent occupancy as shown in the table below:

<i>Bed Type</i>	<i>Beds</i>	<i>Days</i>	<i>Occupancy</i>
Intensive Care	29	2,335	22.1%
Medical/Surgical	113	35,669	86.5%
Obstetrics	36	8,493	64.6%
Pediatric	12	2,357	53.8%
Mental Health	14	2,556	50.0%
Total	204	51,410	69.0%

Source: Madigan Army Medical Center

Medical/Surgical days were driven primarily by internal medicine and general surgery admissions, highlighting Madigan’s role as a community hospital for JBLM. There does not appear to be a need to expand acute inpatient capacity at this time.

Potential Opportunities and Strategies

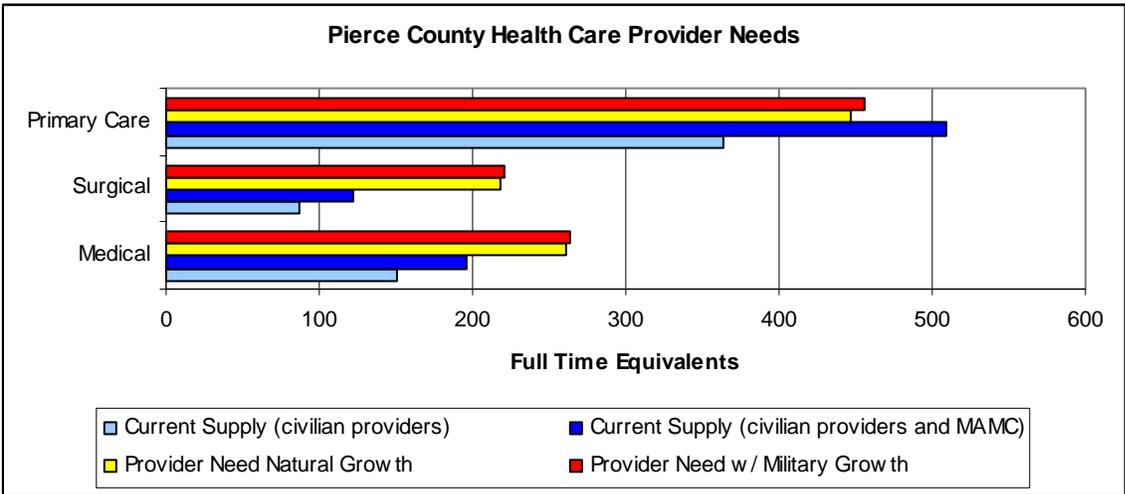
The JBLM Growth Coordination Plan provides the ideal opportunity to address the critical TRICARE provider shortage areas. As many communities grow near the base, new shortage areas may become apparent. As such, TriWest (the TRICARE intermediary), Madigan and local civilian providers must work together to consistently manage and meet those needs.

⁸ Note: This number does not include newborn bassinets.

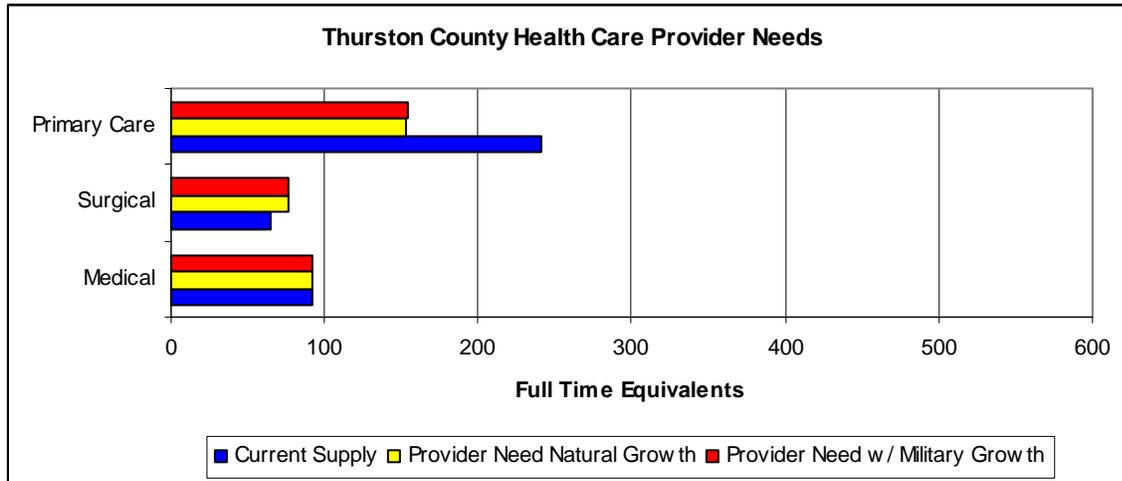
Further, this process offers an opportunity for local providers and TriWest to discuss the needs for faster, less cumbersome credentialing.

Health Care Providers⁹

Absent military growth in the region there will still be a need for additional surgeons in both Pierce and Thurston County. In addition, there will be a need for additional medical specialists, pediatricians and Ob/Gyn’s in Pierce County. Military growth in the region is not expected to create new needs for health care providers in Thurston County. However, military growth will exacerbate the need for physicians in Pierce County. The most substantial impact of this growth will be the need for approximately 10 additional primary care providers to support military families. As a result, these new primary care physicians must be willing to accept a full panel of TRICARE patients to fully meet the need. Please see the exhibits below which demonstrate the needs for health care providers in Pierce and Thurston counties in 2015.



⁹ Providers include physicians and physician extenders. For purposes of this report physician extenders include physician assistants, nurse practitioners, psychologists, social workers, behavioral science officers and nurse anesthetists.



Further, it should be noted that the current HPS Physician Demand Model does not account for the impact of National Health Reform efforts. As more people in the region become insured, the demand for primary care physicians is expected to increase. As such, the need shown in the tables above may be understated.

Potential Opportunities and Strategies

There is a substantial need to recruit pediatricians and Ob/Gyn’s to Pierce County to support both the existing residents in the community and new military population. Further, there are needs for medical specialists in Pierce County, as well as surgeons in both Pierce and Thurston counties. Existing regional providers must work together to recruit these physicians to the region.

Regarding distribution, the JBLM Growth Coordination Plan provides the ideal opportunity to address the critical TRICARE provider shortage areas. As military families move to different communities away from the base, new shortage areas may become apparent. As such, TriWest, Madigan, civilian providers, and local communities must work together to consistently manage and meet those needs.

There are two possible strategies to address the provider shortage:

- 1) Increase the number of participating TRICARE providers in shortage areas.
- 2) Move beneficiaries to areas that have higher densities of TRICARE network providers.

The first strategy, increasing the number of participating TRICARE providers in shortage areas, involves restructuring reimbursement rates and streamlining credentialing. Unfortunately, the former will require Federal action to change policy; this will require working with the Department of Defense and the Congressional delegation. In addition, until the Medicare Sustainable Growth Rate (SGR) is repealed by Congress, each year will bring the threat of automatic cuts (scheduled for 21% in March 2010) to

Medicare reimbursement rates. To streamline credentialing, the JBLM Growth Coordination process offers an opportunity to convene local providers and TriWest for a discussion.

These two steps may be insufficient for several reasons. First, the TRICARE network provider shortage areas may have few or no providers because they were historically rural or the population density cannot support practices (usually a greater problem for specialists). Second, recruitment is complex and providers may have multiple reasons for not wanting to move to an area (e.g., lifestyle, distance to hospitals). Third, even participating providers may limit their practices to a few TRICARE patients.

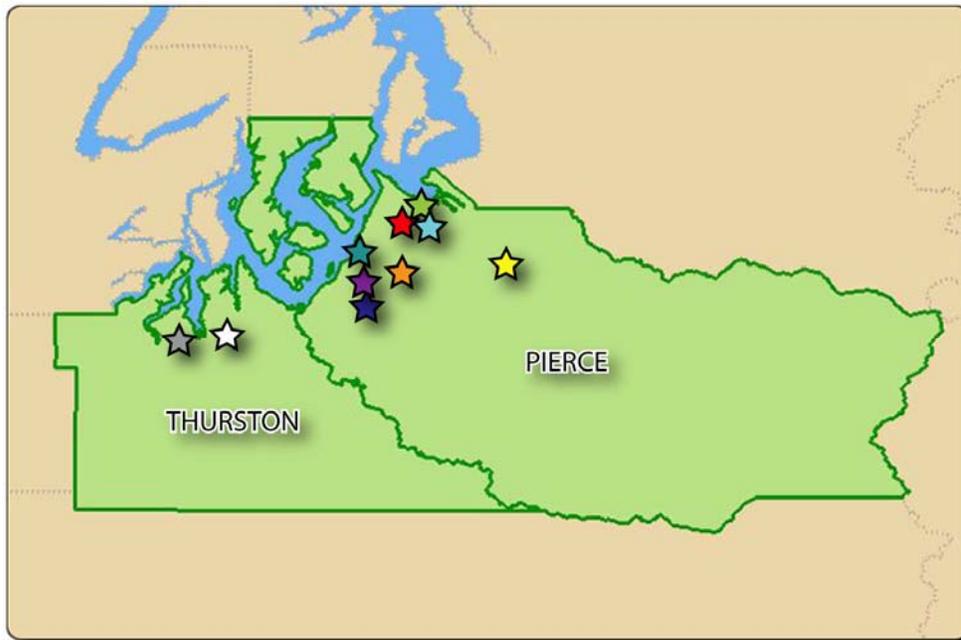
A third step, which is difficult to anticipate, could result if population growth in a community incentivizes an existing practice or health care system to recruit new providers to take advantage of the demand for services. This process could be facilitated by commissioning market studies of communities with high beneficiary populations and creating incentives for practices (e.g., offering income guarantees, forgiving student loans, providing practice management support).

The second strategy to move beneficiaries to areas that have higher densities of TRICARE network providers is a logical, long term planning objective, but is fraught with challenges. Housing choices are influenced by multiple factors such as cost, availability, social connections, marketing, and lifestyle. Often, shortcomings (e.g., distance to services, increased costs of commuting) are either overlooked or are unavoidable. For this strategy to succeed, there would have to be comprehensive planning with compelling incentives. For example, if all new arrivals were provided free or highly subsidized housing in centralized communities with good schools and easy access to services, shopping, recreation, and public transportation (and also offered financial literacy training and connected to support groups), they would be more likely to stay in those areas. Of course, current families and retirees would be unlikely to relocate unless there were significant pressure (e.g., financial loss, physical disability requiring medical services) to do so. On the other hand, the natural turnover of soldiers and their families means there will always be opportunities to influence the decisions of new arrivals.

Inpatient Care

The JBLM region is served by eight community hospitals located in Pierce and Thurston Counties, as well as American Lake and Madigan.¹⁰

¹⁰ Please see the Department of Defense Section for information regarding MAMC.



- ★ Madigan Army Medical Center ★ Allenmore Hospital ★ Good Samaritan Hospital ★ St. Clare Hospital ★ Tacoma General Hospital
- ★ American Lake Veteran's Hospital ★ Capital Medical Center ★ Providence St. Peter Hospital ★ St. Joseph Medical Center ★ Western State Hospital

In 2009, these facilities had the following inpatient capacity and utilization:

	<i>Acute Care Beds</i>	<i>Patient Days</i>	<i>Occupancy</i>
Good Samaritan Hospital	200	53,794	73.7%
Mary Bridge Children's Hospital	72	15,596	59.3%
Tacoma General Hospital	391	81,748	57.3%
St. Clare Hospital	106	29,613	76.5%
St. Joseph Medical Center	249	79,934	88.0%
Allenmore Hospital	130	12,854	27.1%
Capital Medical Center	Unavailable	Unavailable	Unavailable
Providence St. Peter Medical Center	Unavailable	Unavailable	Unavailable

Source: Information provided by local hospitals.

Inpatient rehabilitation services are provided at Good Samaritan Hospital and St. Joseph Medical Center. The capacity of these units is as follows:

	<i>Rehabilitation Beds</i>	<i>Patient Days</i>	<i>Occupancy</i>
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Good Samaritan Hospital	25	6,383	70.0%
St. Joseph Medical Center	34	9,500	76.6%

Source: Information provided by local hospitals.

The growth in the JBLM region between 2009 and 2015 is expected to result in the need for a modest number of additional beds in Pierce and Thurston Counties. However, based on the historical occupancy of the inpatient facilities in the region, there is sufficient existing inpatient acute care and rehabilitation capacity in the region to support the additional JBLM population. As such, the need for inpatient beds should continue to be monitored in the future, but is not a significant issue at this time.

Oral Health Needs

The increased population will result in a minimal need for additional dentists in Pierce County. Based on the data available, the existing shortage of dentists cannot be quantified. As such, it is unclear if the military growth will create a new need for dentists or exacerbate an existing problem. However, regional providers indicate that it is the later. The military population growth in the region from 2009 to 2015 is expected to result in the need for 9 additional dentists in Pierce County. To be effective in meeting military as well as civilian needs these dentists must accept TRICARE in order to fully meet this need.

Need for Dentists

County	Dentists
Pierce	9
Thurston	0

There are currently significant access issues for dental services. Although active duty soldiers receive dental care on base, their families must seek care in the community. Specifically, there is a shortage of dentists in many high growth areas surrounding the base and a shortage of dentists that accept low income and TRICARE patients. Further, the co-pays for dental services may be high and cost prohibitive.

Military families must be made aware of the free treatment and prevention options available in the region, particularly for children. For example, the Lindquist Dental Clinic for Children in South Tacoma provides dental care to children with TRICARE and will waive the co-pay for patients who are financially eligible. In 2009, the clinic provided care to 506 military children, but has capacity to serve many others. Similar practices are available for military spouses.

Potential Opportunities and Strategies

Based on the data available at this time, there is not enough information to quantify the dental shortage in the region. As such, further study is needed to confirm that there is a shortage of providers, and if so, where the key shortage areas are located.

Further, there is a need to educate military families regarding free or low cost dental resources available in the region such as the Lindquist Dental Clinic for Children and community clinics. It is imperative to also address access through transportation and flexible office hours.

Public health interventions can play a role. School-based screenings, varnishes, and sealants can be effective for students but require good provider technique and compliance with follow up. In 2010-11, Tacoma-Pierce County Health Department will be instituting a new program conducted by private providers in Pierce County schools. Water fluoridation is highly effective for prevention of caries and children living on base benefit from the fluoridated JBLM water supply. Many communities around the base lack fluoridated water supplies with the exception of Tacoma and Parkland. Fluoridating more water systems has a contentious history and would require extensive scoping and preparation if it were to be pursued.

Community and Public Health Needs

Following their review of the Health Care Existing Conditions Technical Memorandum the Health Care Expert Panel suggested that the needs assessment include a review of the public health needs in Pierce and Thurston Counties.

Pierce and Thurston Counties are served by separate local public health jurisdictions: the Tacoma-Pierce County Health Department (TPCHD) and Thurston County Public Health & Social Services (TCPHSS), respectively. While there are some differences in programs, both TPCHD and TCPHSS provide many of the same public health services including community health assessment, environmental health, communicable disease surveillance, public health emergency planning, food safety, and chronic disease prevention. The emphasis is on population-based prevention to complement the individual medical treatment provided by health care providers. Prevention programs may target chronic diseases (e.g., cardiovascular disease), maternal/child health (e.g., prematurity and low-birth weight), and social outcomes (e.g., early childhood learning, child abuse, violence).

Both TPCHD and TCPHSS also coordinate activities with and access resources from the Washington Department of Health and the Centers for Disease Control and Prevention.

At JBLM, public health functions are performed by Madigan in coordination with TPCHD. Madigan also has a Public Health Residency Program which trains physicians in preventive and occupational medicine.

Pierce and Thurston County residents compare favorably to the State of Washington average for many of the Major Risk and Protective Factors measured by the Washington State Department of Health in the following table.

Risk Factor	Percent of Whole		
	Pierce County	Thurston County	Washington State
Asthma	8.7	9.8	8.9
Diabetes	7.5	6.6	7.1
Obesity	28.4	23.8	24.2
Overweight	35.9	35.4	36.5
Current Smoker	20.8	20.9	17.1
Cardio-vascular Disease	7.6	6.5	6.8

The most significant chronic disease risk factors in Pierce and Thurston County residents are obesity, overweight and smoking. In particular, smoking is often linked to the military population. Demographics, socialization, longstanding policy that discounts cigarettes and encourages smoking, and the stresses of combat are contributors. Even soldiers who did not smoke often begin smoking once deployed to a combat zone.

In Pierce County, another significant health concern is the incidence of sexually transmitted diseases (STDs). The rates of chlamydia and gonorrhea, in particular, are much greater than the rates for the entire State of Washington. Madigan and TPCHD collaborate in reporting cases, identifying sexual contacts and ensuring treatment.

Disease	2006 Rates per 100,000		
	Pierce County	Thurston County	Washington State
Chlamydia	391.9	249.2	279.5
Gonorrhea	106.7	25.1	66.4
Early Syphilis	1.9	2.6	4.1
Late/Late Latent Syphilis	3.6	-	2.5
Herpes (initial infection)	39.7	52.4	38.4

Many public health interventions and community preventive services require coordination and collaboration among diverse partners, including medical and social services agencies.

Potential Opportunities and Strategies

There are significant opportunities to improve the health status of the JBLM region. Prevention efforts provide the opportunity to reduce the short term need for provider and emergency department visits and hospitalization (thereby reducing the need for significant capital expenditures to expand these services) and long term reduction in chronic disease. All successful strategies for improving the health

of the JBLM region will require the participation of multiple health and social service agencies. Strategies implemented by other sectors, such as an increase in affordable housing or reduction of environmental pollution, will likely result in improved health status of the region.

Smoking and obesity (related to physical inactivity and poor nutrition) are the top two actual causes of death and there are many opportunities to target these two chronic disease risk factors. There needs to be change in the longstanding policies that discount cigarettes and encourage smoking. This will require working with Madigan and JBLM leadership, as well as DoD. New sources of funding need to be identified to replace the cuts to state funded tobacco prevention programs.

Policies should be implemented to encourage physical activity and good nutrition. Both on base and in surrounding communities, increasing walkability, bike lanes, and recreational facilities should be goals. Comprehensive planning policies—such as Complete Streets and locating high density housing adjacent to shopping, recreation, and other services—should be implemented. In schools, physical education programs and Safe Routes to School will directly increase children’s exercise. Good nutrition is facilitated by making healthy foods readily available (e.g., farmers markets, full service supermarkets, community gardens) and policies to review vending machines content and school menus.

To address the high rates of chlamydia and gonorrhea, Madigan and TPCHD already collaborate in reporting cases, identifying sexual contacts, and ensuring treatment. Coordination with community providers would expand the reach.

Public health interventions for behavioral health include programs to increase early childhood learning, improve social support and parenting, reduce adolescent violence, reduce domestic violence, and prevent and treat substance abuse. Many are delivered through evidence-based nursing interventions or social service collaborations located in Family Support Centers. As emphasized in the Behavioral Health Needs section, there needs to be better education, collaboration, and coordination between JBLM, TPCHD, and other services providers.

Regional Coordination

The need for regional collaboration has been discussed in reference to multiple groups above, but bears repeating. Providers in the region agree that patients receive the best care when services in the region are coordinated. In particular, providers should be aware of all of the other services available in the community and at JBLM, so that families can be referred to the most appropriate agency to meet their needs.

There are regular changes in leadership at JBLM and Madigan. There is a need to develop consistent relationships in the community, so that collaboration can occur seamlessly.

Potential Opportunities and Strategies

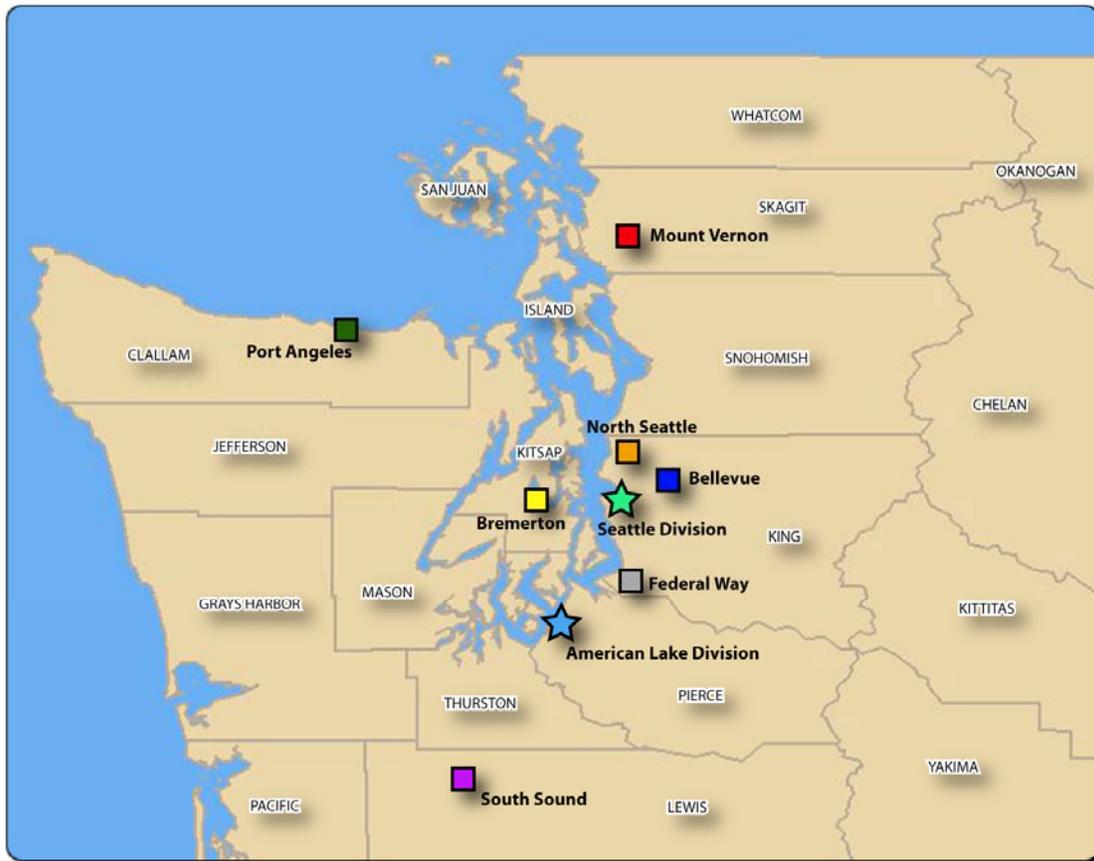
There is a need for more regular communication between health service providers in the region. In particular, there is a need for a consistent commitment from JBLM to be a part of the dialogue, despite regular changes in leadership.

Veteran's Affairs

There are many ways that a Veteran may qualify to receive VA health care at VA medical centers and clinics throughout the country. Eligibility for health services is largely based on two qualifiers: the service member's character of discharge from active military service and length of active military service. In general service members who received an honorable discharge, a general discharge or a discharge under honorable conditions and completed 24 continuous months of active duty service are eligible to receive VA health benefits.¹¹ Upon determination of eligibility, veterans must also enroll in services.

The JBLM region is served by VA Puget Sound, an integrated health system which provides health services at two VA Division Medical Centers and six Community Based Outpatient Clinics (CBOCs). VA Puget Sound is the largest health system in Veteran's Integrated Service Network (VISN) 20, treating over 67,000 veterans in fiscal year 2009. This represents approximately 60 percent of the enrolled veterans in the region.

¹¹ Please see the VA website for additional information and exceptions to these standards, <http://www4.va.gov/healtheligibility/eligibility/DetermineEligibility.asp>



Medical Center
 Existing Outpatient Clinic
 Outpatient Clinic - Under Development

The majority of outpatient visits to these sites of care fell into the following specialty categories:

- Primary Care
- Mental Health (General Psychiatry/Post Traumatic Stress Disorder)
- Combined Eye Care
- Dental
- Dermatology
- Audiology

As veterans continue to experience increasing demand for mental health services, the provision and expansion of mental health services at all of its facilities is a priority for VA Puget Sound. Mental health services are provided at each CBOC in the region, as well as in the Seattle Emergency Department and Urgent Care. In addition, the American Lake Campus provides dedicated inpatient psychiatric care. The VA is also expanding its suicide prevention efforts throughout its service sites. VA Puget Sound

recognizes that the behavioral health needs of veterans are becoming more complex and is continuing to evaluate expansion options as they become necessary. In addition, the VA recognizes a need for a continuum of behavioral health services in the community to best meet the needs of military and civilian residents. As such, outpatient and inpatient services must be coordinated and services should be available for patients at all acuity levels. In particular, as behavioral health needs become more acute, the absence of involuntary inpatient care in the region will become a significant burden.

Aside from mental health, the greatest physician needs for the VA Puget Sound are neurosurgery and rural health outreach. Often, neurosurgery patients must be sent out of the region for surgery, but can return to one of the local VA centers for rehabilitation. Ideally, the VA would like to provide a full spectrum of services without needing to send patients out of the region. In addition, the VA Puget Sound is committed to expanding its geographic footprint in rural areas. Where physicians cannot be physically present to provide services, VA Puget Sound is developing an extensive telemedicine program.

The VA also reports that VA physical therapists and occupational therapists are often at capacity; therefore, the VA must contract for these services with civilian providers. In the near future, the VA expects to complete an extensive expansion of primary care services and will likely also expand rehabilitation and hospice services. Finally, dental services at the VA are highly utilized and as the local veteran community grows there will be greater needs for dentists in the region.

Potential Opportunities and Strategies

The Puget Sound region is a highly attractive area for many service members and their families to retire. As such, it is expected that the veteran population in the region will continue to experience growth for the foreseeable future, particularly as more service members are stationed at Joint Base Lewis McChord over the course of their careers. There are great opportunities to ensure that the needs of veterans and their families are being met.

One of the most important strategies for improving veterans' care is continued collaboration between the Department of Defense and the Department of Veteran's Affairs. In February 2010, the DoD and VA realigned the disability ratings claims process, allowing soldiers to simultaneously enter the Army's medical evaluation board and apply for VA disability claims. Further collaborative efforts will ensure that veterans access all of the benefits for which they are eligible.

In addition, as the behavioral health needs of veterans increase it is imperative that these services are available in the community. The VA and community providers must work together to ensure that veterans in need have the ability to access timely and appropriate care.

Summary of Needs Assessment

As of July 1, 2010, the preliminary needs assessment shows the need to address the following issues. Final needs, strategies and recommendations will be included in the main text of the final Growth Coordination Plan.

Need	Opportunity	Potential Strategies
1 Enhance the behavioral health system	Ensure the mental health of families in the region	1 Increase collaborative efforts between community and military providers of behavioral health care
		2 Work with the State to develop additional inpatient psychiatric capacity in the region
		3 Complete a comprehensive behavioral health study in the region
2 Improve access to TRICARE providers	Improve the health status of military families	1 Identify key shortage areas
		2 Develop collaborative plans for recruiting physicians (particularly pediatricians and Ob/Gyn's) to shortage areas
		3 Improve the TRICARE credentialing process
3 Enhance services available to veterans	Ensure the health needs of veterans are being met	1 Continue developing collaborative relationships between DoD health services and the VA
		2 Coordinate with community providers to ensure optimal behavioral health services are available for veterans
4 Enhance access to dental providers	Ensure that military families access affordable dental care	1 Increase the visibility of dental providers that serve military families at a reduced price
5 Improve the health status of the region	Improve the health status of the region	1 Focus on collaborative opportunities to reduce health risk factors in the region
6 Enhance collaboration between providers	Improve access to services and the health status of the region	1 Develop a regular coalition focused on coordinating health services in the region
		2 Ensure consistent participation from JBLM in regional coordination efforts