



Board of Behavioral Sciences

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MEETING NOTICE

LCSW Education Committee

December 8, 2008

8:30 a.m. to 12:00 p.m.

Holiday Inn San Diego Downtown Skyline Room 1617 First Avenue San Diego, CA 92101 (800) 366-3164 or (619) 239-9600

- I. Introductions
II. Purpose of the Committee
III. Review and Approve Minutes of October 27, 2008
IV. Presentation from the Council on Social Work Education via Teleconference
V. Review of Concentration Year MSW Curriculum
VI. Presentation on Clinical Social Work Provided to Military Service Members
VII. Future Meeting Dates
VIII. Suggestions for Future Agenda Items
IX. Public Comment for Items Not on the Agenda

Public Comment on items of discussion will be taken during each item. Time limitations will be determined by the Chairperson. Items will be considered in the order listed. Times are approximate and subject to change. Action may be taken on any item listed on the Agenda.

THIS AGENDA AS WELL AS BOARD MEETING MINUTES CAN BE FOUND ON THE BOARD OF BEHAVIORAL SCIENCES WEBSITE AT www.bbs.ca.gov

NOTICE: The meeting facilities are accessible to persons with disabilities. Please make requests for accommodations to the attention of Christina Kitamura at the Board of Behavioral Sciences, 1625 N. Market Boulevard, Suite S-200, Sacramento, CA 95834, or by phone at 916-574-7835, no later than one week prior to the meeting. If you have any questions please contact the Board at (916) 574-7830.



Arnold Schwarzenegger Governor

State of California State and Consumer Services Agency

Department of Consumer Affairs

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**To:** LCSW Education Committee

**Date:** December 1, 2008

**From:** Christy Berger  
MHSA Coordinator

**Telephone:** (916) 574-7834

**Subject:** Review of Concentration Year MSW Curriculum

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## Background

MSW programs prepare graduates for advanced professional practice in an area of concentration, providing advanced training in a specific practice area. The concentration curriculum takes place during the second half of the MSW program. Concentrations may include fields of practice, problem areas, intervention methods, and practice contexts and perspectives.

The Council on Social Work Education's (CSWE) accreditation standards require accredited MSW programs to have:

“...a concentration curriculum that includes concentration objectives, a conceptual framework built on relevant theories, and field education that supports the advanced curriculum.”

CSWE also requires programs to:

“...identify advanced knowledge and skills in order to build an advanced curriculum from the foundation [year] content. In the advanced [concentration year] curriculum, the foundation content areas are addressed in greater depth, breadth, and specificity and support the program's conception of advanced practice.”

Foundation content areas are:

- Values and Ethics
- Diversity
- Populations-at-Risk and Social and Economic Justice
- Human Behavior and the Social Environment
- Social Welfare Policy and Services
- Social Work Practice
- Research
- Field Education

MSW programs are required to offer one or more concentrations and where there is more than one concentration offered, students must select just one. For schools that offer just one concentration, it is

typically “advanced generalist practice,” defined a little differently for each school, but always includes training in both micro (individuals, families and groups) and macro (organizations and communities) social work practice.

In addition to required coursework in the concentration year, many schools require completion of two or three elective courses related to the degree, and most schools also require completion of a project or a thesis. All schools require completion of field education hours as mandated by CSWE.

The concentrations offered in California and the number of schools in which they are offered are as follows:

- Advanced Generalist/Advanced Integrative Practice (7)
- Clinical/Direct Practice (6)
- Policy, Planning and Administration (6)
- Community Practice (4)
- Children, Youth and Families (4)
- Older Adults and Families/Gerontology (2)
- Health (2)
- Multi Systems Practice (2)
- Urban Family Strengths-Based Practice (1)
- Social Action and Change (1)
- Work and Life (1)

A chart showing each school’s concentration curriculum is provided in the attachment.

## **Attachment**

Concentration Year Coursework in California MSW Programs

**Concentration Year Coursework in California MSW Programs**  
**Note: All Named Courses are Required**

	Azusa Pacific		CSU Bakersfield	CSU Chico	CSU Dominguez Hills
Concentration	Clinical Practice with Individuals and Families	Community Practice and Partnerships	Advanced Generalist	Advanced Generalist	Community Practice
<b>Concentration Year Courses</b>	<ul style="list-style-type: none"> <li>▪ SOCW 536 Adv. Clinical Practice I: Adult Mental Health (3)</li> <li>▪ SOCW 537 Children and Adolescents (3)</li> <li>▪ SOCW 538 Clinical Practice with Groups (2)</li> <li>▪ SOCW 546 Advanced Clinical Practice II: Child Welfare and Family Therapy (3)</li> <li>▪ SOCW 547 Social Welfare Policy and Health/Mental Health Care (2)</li> <li>▪ SOCW 534 Field Seminar III (1)</li> <li>▪ SOCW 539 Field III: Clinical Practice with Individuals and Families (3)</li> <li>▪ SOCW 548 Field IV (3)</li> <li>▪ SOCW 544 Field Seminar IV (1)</li> <li>▪ SOCW 541 Capstone Leadership Project (3)</li> <li>▪ Electives (6)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SOCW 531 Human Rights and Sustainable Development (2)</li> <li>▪ SOCW 532 Advanced Community Practice (3)</li> <li>▪ SOCW 533 Organizational Behavior and Management (3)</li> <li>▪ SOCW 542 International Social Work Policy and Practice (3)</li> <li>▪ SOCW 543 Fundraising and Grant Writing (2)</li> <li>▪ SOCW 534 Field Seminar III (1)</li> <li>▪ SOCW 535 Field III: Community (3)</li> <li>▪ SOCW 544 Field Seminar IV (1)</li> <li>▪ SOCW 545 Field IV: Community (3)</li> <li>▪ SOCW 541 Capstone Leadership Project (3)</li> <li>▪ Electives (6)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SW 610: Advanced Social Policy and Services (5)</li> <li>▪ SW 620: Advanced Human Behavior for Social Workers (5)</li> <li>▪ SW 646: Advanced Practice I (5)</li> <li>▪ SW 647: Advanced Practice II (5)</li> <li>▪ SW 648: Advanced Practice III (5)</li> <li>▪ SW 630: Advanced Research Methods for Social Work Practice (5)</li> <li>▪ SW 650: Advanced Field Practicum I (9)</li> <li>▪ Elective (5)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SWRK 641 Advanced Practice in Mental Health Services (3) <b>OR</b></li> <li>▪ SWRK 642 Advanced Practice in Families, Children and Youth Services (3)</li> <li>▪ SWRK 643 Assessment of Individuals &amp; Families (3)</li> <li>▪ SWRK 652 Supervision, Program Development &amp; Administration (3)</li> <li>▪ SWRK 681 Advanced Family &amp; Child Treatment (3) <b>OR</b></li> <li>▪ SWRK 656 Advanced Social Work Macro Practice (3)</li> <li>▪ SWRK 654 Social Policy in Mental Health Services (3) <b>OR</b></li> <li>▪ SWRK 655 Social Policy in Families, Children and Youth Services (3)</li> <li>▪ SWRK 653 Research II: Program Evaluation for Social Work (3)</li> <li>▪ SWRK 648 Advanced Practicum I (4)</li> <li>▪ SWRK 658 Advanced Practicum II (4)</li> <li>▪ Thesis/Project (2) <b>OR</b> Elective (3)</li> </ul>	<ul style="list-style-type: none"> <li>▪ MSW 550 Generalist Social Work Practice III: Children, Youth and Families (3) <b>OR</b></li> <li>▪ MSW 551 Generalist Social Work Practice III: Community Health/Mental Health (3)</li> <li>▪ MSW 553 Multicultural Perspectives of Practice (3)</li> <li>▪ SW 555 Generalist Social Work Practice IV: Administration (3)</li> <li>▪ MSW 560 Social Welfare Policy III: Children, Youth and Families (3) <b>OR</b></li> <li>▪ MSW 561 Social Welfare Policy III: Community Health/Mental Health (3)</li> <li>▪ MSW 580, 581 <b>OR</b> 582 Seminar in: Child Welfare Issues, Health Care Issues, OR Mental Health Issues (3)</li> <li>▪ MSW 570 Fieldwork Practicum III (3)</li> <li>▪ MSW 571 Fieldwork Practicum IV (3)</li> <li>▪ MSW 598 Directed Research (3)</li> <li>▪ MSW 599 Directed Project or Thesis (3)</li> <li>▪ Elective (3)</li> </ul>
<b>Unit System</b>	30 Semester Units		39 Quarter Units	28-29 Semester Units	30 Semester Units

**Concentration Year Coursework in California MSW Programs**  
**Note: All Named Courses are Required**

Concentration	CSU East Bay		CSU Fresno	CSU Long Beach	
	Children Youth and Families	Community Mental Health	Multi Systems Practice	Children Youth and Families	Older Adults and Families
Concentration Year Courses	<ul style="list-style-type: none"> <li>▪ 6500 Advanced Micro Practice: Children, Youth, and Families (4)</li> <li>▪ 6510 Advanced Mezzo Practice: Children, Youth, and Families (4)</li> <li>▪ 6520 Advocacy and Macro Practice: Children, Youth, Families (4)</li> <li>▪ 6530 Field Instruction IV (4)</li> <li>▪ 6531 Field Instruction V (4)</li> <li>▪ 6532 Field Instruction VI (4)</li> <li>▪ 6932 Quantitative and Qualitative Analysis (4)</li> <li>▪ 6935 Program Evaluation (4)</li> <li>▪ 6909 Capstone: Departmental Thesis (4) OR</li> <li>▪ 6959 Capstone Seminar (4)</li> <li>▪ Electives (8)</li> </ul>	<ul style="list-style-type: none"> <li>▪ 6505 Advanced Micro Practice: Community Mental Health (4)</li> <li>▪ 6515 Advanced Mezzo Practice: Community Mental Health (4)</li> <li>▪ 6525 Advocacy and Macro Practice: Community Mental Health (4)</li> <li>▪ 6530 Field Instruction IV (4)</li> <li>▪ 6531 Field Instruction V (4)</li> <li>▪ 6532 Field Instruction VI (4)</li> <li>▪ 6932 Quantitative and Qualitative Analysis (4)</li> <li>▪ 6935 Program Evaluation (4)</li> <li>▪ 6909 Capstone: Departmental Thesis (4) OR</li> <li>▪ 6959 Capstone: Integrative Seminar (4)</li> <li>▪ Electives (8)</li> </ul>	<ul style="list-style-type: none"> <li>▪ S Wrk 224 Advanced Practice with Individuals (3)</li> <li>▪ S Wrk 225 Advanced Practice with Groups (3)</li> <li>▪ S Wrk 246 Advanced Practice with Formal Organizations (2)</li> <li>▪ S Wrk 227 Advanced Social Work Practice with Couples and Families (3)</li> <li>▪ S Wrk 247 Advanced Practice with Communities (3)</li> <li>▪ S Wrk 298: Project OR 299: Individual Thesis (2)</li> <li>▪ S Wrk 292 Seminar in Thesis/Project (2)</li> <li>▪ S Wrk 282 Advanced Field Instructed Practice I (3)</li> <li>▪ S Wrk 283 Advanced Field Instructed Practice II (3)</li> <li>▪ Electives (6)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SW 560--Direct Intervention and Planning: Focus on Children, Youth and Families (3)</li> <li>▪ SW 660--Direct Intervention with Families and Groups: Focus on Children, Youth and Families (3)</li> <li>▪ SW 681--Advanced Policy and Programming with Children, Youth and Families (3)</li> <li>▪ SW 596 A&amp;B Field Instruction I and II (6)</li> <li>▪ SW 680 A&amp;B-- Field Instruction III and IV (6)</li> <li>▪ SW 698/699--Master's Thesis on a topic related to concentration (6)</li> <li>▪ Electives (6)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SW 561--Direct Intervention and Planning: Focus on Older Adults and Families (3)</li> <li>▪ SW 661--Direct Intervention with Families and Groups: Focus on Older Adults and Families (3)</li> <li>▪ SW 682--Advanced Policy and Programming with Older Adults and Families (3)</li> <li>▪ SW 596 A&amp;B Field Instruction I and II (6)</li> <li>▪ SW 680 A&amp;B-- Field Instruction III and IV (6)</li> <li>▪ SW 698/699--Master's Thesis on a topic related to concentration (6)</li> <li>▪ Electives (6)</li> </ul>
Unit System	44 Quarter Units		30 Semester Units	33 Semester Units	

**Concentration Year Coursework in California MSW Programs**  
**Note: All Named Courses are Required**

	<b>CSU Los Angeles</b>	<b>CSU Northridge</b>	<b>CSU Sacramento</b>	<b>CSU San Bernardino</b>	<b>CSU Stanislaus</b>
<b>Concentration</b>	<b>Advanced Urban Generalist</b>	<b>Urban Family Strengths-Based Practice</b>	<b>Advanced Integrated Practice</b>	<b>Advanced Generalist Practice</b>	<b>Advanced Integrative Practice</b>
<b>Concentration Year Courses</b>	<ul style="list-style-type: none"> <li>▪ SW 556 Advanced Practice I (4)</li> <li>▪ SW 553 Advanced Practice II: Diversity Perspectives over the Life Course (4)</li> <li>▪ SW 560 Advanced Practice III: Capstone Seminar (4)</li> <li>▪ SW 571 Administration and Management of Social Service Agencies (4)</li> <li>▪ SW 577 Policy and Services/ Applications (4)</li> <li>▪ SW 550 Advanced Social Welfare Research (3)</li> <li>▪ SW 591 A, B, C Field Practicum (12)</li> <li>▪ SW 599 A &amp; B Thesis or Research Project I &amp; II (6)</li> <li>▪ Electives (4 units)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SWRK 601 Advanced Social Work Practice with Urban Families I (3)</li> <li>▪ SWRK 602 Advanced Social Work Practice with Urban Families II (3)</li> <li>▪ SWRK 635 Advanced Skills in Program Evaluation and Research with Urban families (3)</li> <li>▪ SWRK 645 Urban Social Policy and Advocacy (3)</li> <li>▪ SWRK 630 Family Crisis, Trauma and Grief (3)</li> <li>▪ SWRK 622A &amp; B Advanced Field Practicum with Urban Families I &amp; II (8)</li> <li>▪ SWRK 698 Graduate Project (2)</li> <li>▪ Electives (6)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SWRK 204 C &amp; D Multi-level Practice with Vulnerable Life Conditions (6)</li> <li>▪ SWRK 251 Advanced Policy (3)</li> <li>▪ SWRK 295 C &amp; D Second Year Field Instruction (10)</li> <li>▪ SWRK 500 Culminating Experience (4)</li> <li>▪ Electives (9)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SW 645: Advanced Micro Practice 1 (4)</li> <li>▪ SW 646: Advanced Micro Practice 2 (4)</li> <li>▪ SW 647: Advanced Micro Practice 3 (2)</li> <li>▪ SW 655: Advanced Macro Practice 1 (4)</li> <li>▪ SW 656: Advanced Macro Practice 2 (4)</li> <li>▪ SW 657: Advanced Macro Practice 3 (2)</li> <li>▪ SW 660: Advanced Practice Integrative Seminar (2)</li> <li>▪ SW 625A, B: Implementation of Research Project (4)</li> <li>▪ SW 608D: Advanced Field Work I (4)</li> <li>▪ SW 608E: Advanced Field Work II (4)</li> <li>▪ SW 608F: Advanced Field Work III (4)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SW5032 Advanced Integrative Practice with Children, Adults, and Families (3)</li> <li>▪ SW5033 Advanced Integrative Practice with Groups (2)</li> <li>▪ SW5034 Advanced Integrative Practice with Community and Organizations (3)</li> <li>▪ SW5041 Field Instruction (Practicum) II (6)</li> <li>▪ SW5990/5960 Thesis or Research Project (2)</li> <li>▪ SW5991 Social Work Capstone Course (4)</li> <li>▪ Electives (6-11)</li> </ul>
<b>Unit System</b>	45 Quarter Units	31 Semester Units	32 Semester Units	38 Quarter Units	26-31 Semester Units

**Concentration Year Coursework in California MSW Programs**  
**Note: All Named Courses are Required**

	<b>Humboldt State</b>	<b>Loma Linda</b>		<b>SDSU</b>	
<b>Concentration</b>	<b>Advanced Generalist Practice (emphasis on rural and native Americans)</b>	<b>Clinical Practice</b>	<b>Policy, Planning and Administration</b>	<b>Direct Practice</b>	<b>Administration</b>
<b>Concentration Year Courses</b>	<ul style="list-style-type: none"> <li>▪ SW 640 Advanced Practice in Child Welfare and Indian Child Welfare (3)</li> <li>▪ SW 641 Advanced Practice in Mental Health (3)</li> <li>▪ SW 642 Advanced Practice in Substance Abuse (3)</li> <li>▪ SW 643 Community Work (3)</li> <li>▪ SW 630 Legal and Political Social Work (3)</li> <li>▪ SW 644 Advanced Practice in Public, Private and Tribal Organizations (3)</li> <li>▪ SW 656 Advanced Internship Seminar (1)</li> <li>▪ SW 657 Advanced Internship (6)</li> <li>▪ SW 687 Capstone Seminar (3)</li> <li>▪ Elective (3)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SOWK 613 Human Behavior in a Cross-Cultural Environment III (3)</li> <li>▪ SOWK 660 Advanced Theory and Practice for Working with Ethnically Diverse Clients (3)</li> <li>▪ SOWK 682 Legal and Ethical Aspects of Health and Mental Health (3)</li> <li>▪ SOWK 680 Children &amp; Families Policies &amp; Services (3) <b>OR</b></li> <li>▪ SOWK 681 Health and Mental Health Policies and Services (3)</li> <li>▪ SOWK 661 Time-Limited Services and Interventions (3)</li> <li>▪ SOWK 663 Advanced Social Work Practice with Individuals (3)</li> <li>▪ SOWK 665 Advanced Social Work Practice with Groups (3)</li> <li>▪ SOWK 667 Advanced Integrative Practice (3)</li> <li>▪ SOWK 695 A, B, C Advanced Research Methods (6)</li> <li>▪ SOWK 787A, B, C Advanced Professional Practicum and Seminar (12)</li> <li>▪ SOWK 675 Supervision (3)</li> <li>▪ Electives (6)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SOWK 613 Human Behavior in a Cross-Cultural Environment III (3)</li> <li>▪ SOWK 660 Advanced Theory and Practice for Working with Ethnically Diverse Clients (3)</li> <li>▪ SOWK 682 Legal and Ethical Aspects of Health and Mental Health (3)</li> <li>▪ SOWK 680 Children &amp; Families Policies &amp; Services (3) <b>OR</b></li> <li>▪ SOWK 681 Health and Mental Health Policies and Services (3)</li> <li>▪ SOWK 672 Organizations and Systems (3)</li> <li>▪ SOWK 673 Program Planning and Evaluation (3)</li> <li>▪ SOWK 676A Human Resources Planning and Development (3)</li> <li>▪ SOWK 676B Human Resource Planning and Development Seminar (3)</li> <li>▪ SOWK 683 Advanced Policy Practice (3)</li> <li>▪ SOWK 695 A, B, C Advanced Research Methods (6)</li> <li>▪ SOWK 787A, B, C Advanced Professional Practicum and Seminar (12)</li> <li>▪ Electives (6)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SWORK 720. Seminar in Selected Topics in Human Behavior and Social Environment (3)</li> <li>▪ SWORK 702. Seminar in Selected Social Welfare Policy and Services (3)</li> <li>▪ SWORK 739. Advanced Seminar in Social Work Practice with Families (3)</li> <li>▪ SWORK 744. Advanced Seminar in Selected Topics in Direct Practice Social Work (3)</li> <li>▪ SWORK 791. Applied Social Work Practice Research Seminar (3) <b>OR</b></li> <li>▪ SWORK 797. Research (3)</li> <li>▪ SWORK 799A. Thesis (3) <b>OR</b></li> <li>▪ SWORK 799C. Comprehensive Examination (0)</li> <li>▪ SWORK 750. Advanced Field Practicum (8)</li> <li>▪ Electives (6-9)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SWORK 720. Seminar in Selected Topics in Human Behavior and Social Environment (3)</li> <li>▪ SWORK 702. Seminar in Selected Social Welfare Policy and Services (3)</li> <li>▪ SWORK 740. Advanced Seminar in Social Work Administration (3)</li> <li>▪ SWORK 745. Advanced Seminar in Selected Topics in Social Work Administration (3)</li> <li>▪ SWORK 791. Applied Social Work Practice Research Seminar (3) <b>OR</b></li> <li>▪ SWORK 797. Research (3)</li> <li>▪ SWORK 799A. Thesis (3) <b>OR</b></li> <li>▪ SWORK 799C. Comprehensive Examination (0)</li> <li>▪ SWORK 750. Advanced Field Practicum (8)</li> <li>▪ Electives (6-9)</li> </ul>
<b>Unit System</b>	31 Semester Units	51 Quarter Units		32 Semester Units	

**Concentration Year Coursework in California MSW Programs**  
**Note: All Named Courses are Required**

Concentration	SFSU			San Jose State
	Administration and Planning	Individuals, Families, and Groups	Social Action and Change	Transcultural Multisystems Practice
Concentration Year Courses	<ul style="list-style-type: none"> <li>▪ SW 701 Social Policy Analysis (3)</li> <li>▪ SW 721 Evaluative Research Methods (3) <b>OR</b></li> <li>▪ SW 820 Advanced Research Methods (3)</li> <li>▪ SW 850 Human Services Administration I (3)</li> <li>▪ SW 880 Computers and Human Services Administration (2)</li> <li>▪ SW 800 Planning and Program Development (3)</li> <li>▪ SW 864 Human Services Administration II (3)</li> <li>▪ SW 895 Research/Professional Practice Project in SW (3) <b>OR</b></li> <li>▪ SW 898 Master's Thesis Elective (3)</li> <li>▪ SW 740 Field Instruction (6)</li> <li>▪ SW 741 Graduate Field Seminar (2)</li> <li>▪ Elective (3)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SW 701 Social Policy Analysis (3)</li> <li>▪ SW 721 Evaluative Research Methods (3) <b>OR</b></li> <li>▪ SW 820 Advanced Research Methods (3)</li> <li>▪ SW 832 Social Group Work (3)</li> <li>▪ SW 831 Advanced Casework (3) <b>OR</b></li> <li>▪ SW 833 Advanced Group (3)</li> <li>▪ SW 740 Field Instruction (6)</li> <li>▪ SW 895 Research/Professional Practice Project in SW (3) <b>OR</b></li> <li>▪ SW 898 Master's Thesis Elective (3)</li> <li>▪ SW 741 Graduate Field Seminar (2)</li> <li>▪ Elective (7)</li> </ul>	<ul style="list-style-type: none"> <li>▪ SW 701 Social Policy Analysis (3)</li> <li>▪ SW 835 Theories, Methods, and Strategies for Social Action &amp; Change (3)</li> <li>▪ SW 800 Planning and Program Development (3)</li> <li>▪ SW 836 Social Action and Change for Economic &amp; Social Justice (3)</li> <li>▪ SW 721 Evaluative Research Methods (3) <b>OR</b></li> <li>▪ SW 820 Advanced Research Methods (3)</li> <li>▪ SW 740 Field Instruction (6)</li> <li>▪ SW 741 Graduate Field Seminar (2)</li> <li>▪ SW 895 Research/Professional Practice Project in SW (3) <b>OR</b></li> <li>▪ SW 898 Master's Thesis Elective (3)</li> <li>▪ Elective (2-3)</li> </ul>	<ul style="list-style-type: none"> <li>▪ ScWk 222 - Transcultural Multi-Systems Practice I: Family Systems (3)</li> <li>▪ ScWk 223 - Transcultural Multi-Systems Practice II: Community Systems (3)</li> <li>▪ ScWk 250, 260, 270, or 280 Policy and Practice Course (Aging, Child and Family Welfare, Schools, or Health/Mental Health) (3)</li> <li>▪ ScWk 251, 261, 262, 271, or 281 Social Work Practice Course (Aging, Children, Educational Settings, Health/Mental Health) (3)</li> <li>▪ ScWk 232 - Social Work Practicum III (5)</li> <li>▪ ScWk 233 - Social Work Practicum IV (5)</li> <li>▪ ScWk 298 - Special Study (3)</li> <li>▪ Elective (3)</li> </ul>
Unit System	28-31 Semester Units			28 Semester Units

**Concentration Year Coursework in California MSW Programs**  
**Note: All Named Courses are Required**

<b>UC Berkeley</b>					
<b>Concentration</b>	<b>Management and Planning</b>	<b>Child and Family Services</b>	<b>Community Mental Health Services</b>	<b>Health Services</b>	<b>Gerontology Services</b>
<b>Concentration Year Courses</b>	<ul style="list-style-type: none"> <li>▪ Any series 220 or 230 course (Policy) (2 units)</li> <li>▪ Any series 270 course (Diversity) (2)</li> <li>▪ SOC WEL 252 Management Practice (2)</li> <li>▪ SOC WEL 254 Policy Practice (2)</li> <li>▪ SOC WEL 282A &amp; B Seminar in Social Welfare Research (4)</li> <li>▪ SOC WEL 401 Field Practicum (12)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Any series 210 course (Human Development) (2)</li> <li>▪ Any series 230 course (Policy) (2)</li> <li>▪ Any series 250 course (Direct Practice) (2)</li> <li>▪ Any series 270 course (Diversity) (2)</li> <li>▪ SOC WEL 282A &amp; B Seminar in Social Welfare Research (4)</li> <li>▪ SOC WEL 401 Field Practicum (12)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Any series 210 course (Human Development) (2)</li> <li>▪ Any series 230 course (Policy) (2)</li> <li>▪ Any series 250 course (Direct Practice) (2)</li> <li>▪ SOC WEL 223 Advanced Seminar in Community Mental Health (2)</li> <li>▪ SOC WEL 282A &amp; B Seminar in Social Welfare Research (4)</li> <li>▪ SOC WEL 401 Field Practicum (12)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Any series 210 course (Human Development) (2)</li> <li>▪ Any series 230 course (Policy) (2)</li> <li>▪ Any series 250 course (Direct Practice) (2)</li> <li>▪ SOC WEL 282A &amp; B Seminar in Social Welfare Research (4)</li> <li>▪ SOC WEL 401 Field Practicum (12)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Any series 230 course (Policy) (2)</li> <li>▪ Any series 250 course (Direct Practice) (2)</li> <li>▪ Any series 270 course (Diversity) or other approved course (2)</li> <li>▪ SOC WEL 210C Aging Processes (2)</li> <li>▪ SOC WEL 282A &amp; B Seminar in Social Welfare Research (4)</li> <li>▪ SOC WEL 401 Field Practicum (12)</li> </ul>
<b>Unit System</b>	22-26 Semester Units				

<b>UCLA</b>		
<b>Concentration</b>	<b>Social Work Practice with Individuals, Families and Groups</b>	<b>Social Work Practice in Organizations, Communities, and Policy Settings</b>
<b>Concentration Year Courses</b>	<ul style="list-style-type: none"> <li>▪ 231A. Advanced Theory of Social Welfare Practice with Individuals, Families, &amp; Groups IV (4)</li> <li>▪ 231B. Advanced Theory of Social Welfare Practice with Individuals, Families, &amp; Groups V (4)</li> <li>▪ 231C. Advanced Theory of Social Welfare Practice with Individuals, Families, and Groups VI (4)</li> <li>▪ 202B. Dynamics of Human Behavior (2)</li> <li>▪ One series M290 course (Policy) (4)</li> <li>▪ One series 285 course (Research) (4)*</li> <li>▪ 402A, B, C. Advanced Practicum: Social Work (12)</li> <li>▪ Elective (4)</li> </ul>	<ul style="list-style-type: none"> <li>▪ 241A. Advanced Theory of Social Welfare Practice in Organizations, Communities, and Policy Settings IV (4)</li> <li>▪ 241A. Advanced Theory of Social Welfare Practice in Organizations, Communities, and Policy Settings V (4)</li> <li>▪ 241A. Advanced Theory of Social Welfare Practice in Organizations, Communities, and Policy Settings VI (4)</li> <li>▪ 202B. Dynamics of Human Behavior (2)</li> <li>▪ One series M290 course (Policy) (4)</li> <li>▪ One series 285 course (Research) (4)*</li> <li>▪ 402A, B, C. Advanced Practicum: Social Work (12)</li> <li>▪ Elective (4)</li> </ul>
<b>Unit System</b>	38 Quarter Units	

**Concentration Year Coursework in California MSW Programs**  
**Note: All Named Courses are Required**

<b>USC</b>					
<b>Concentration</b>	<b>Community Organization, Planning and Administration</b>	<b>Families and Children</b>	<b>Health</b>	<b>Mental Health</b>	<b>Work and Life</b>
<b>Concentration Year Courses</b>	<ul style="list-style-type: none"> <li>▪ 629 Evaluation of Research: Community Organization, Planning and Administration (3)</li> <li>▪ 639 Social Policy for Managers, Planners and Community Organizers (3)</li> <li>▪ 648 Management for Community and Social Services (3)</li> <li>▪ SOWK 611 Leadership in the Social Work Profession and Organizations: Theory and Practice (3)</li> <li>▪ SOWK 686abc Field Practicum II (3 or 4)</li> <li>▪ Electives (12)</li> </ul>	<ul style="list-style-type: none"> <li>▪ 601 Advanced Theories and Clinical Interventions with Children and Adolescents (3)</li> <li>▪ 602 Advanced Theories and Clinical Interventions with Families (3)</li> <li>▪ 603 Merging Policy, Planning and Research for Change in Families and Children Settings (3)</li> <li>▪ SOWK 611 Leadership in the Social Work Profession and Organizations: Theory and Practice (3)</li> <li>▪ SOWK 686abc Field Practicum II (3 or 4)</li> <li>▪ Electives (12)</li> </ul>	<ul style="list-style-type: none"> <li>▪ 631 Advanced Theories and Clinical Interventions in Health Care (3)</li> <li>▪ 632 Program Planning and Evaluation in Health Care (3)</li> <li>▪ 636 Social Policy: Health Care (3)</li> <li>▪ SOWK 611 Leadership in the Social Work Profession and Organizations: Theory and Practice (3)</li> <li>▪ SOWK 686abc Field Practicum II (3 or 4)</li> <li>▪ Electives (12)</li> </ul>	<ul style="list-style-type: none"> <li>▪ 605 Human Development and Mental Health (3)</li> <li>▪ 625 Evaluation of Research: Mental Health (3)</li> <li>▪ 645 Clinical Practice in Mental Health Settings (3)</li> <li>▪ SOWK 611 Leadership in the Social Work Profession and Organizations: Theory and Practice (3)</li> <li>▪ SOWK 686abc Field Practicum II (3 or 4)</li> <li>▪ Electives (12)</li> </ul>	<ul style="list-style-type: none"> <li>▪ 671 Clinical Interventions and Advanced Theories in Work Settings (3)</li> <li>▪ 672 Improving Work Life Through Social Policy and Managing Organizational Development and Change (3)</li> <li>▪ 673 Program Development, Training, Grant Writing and Program Evaluation in Work Settings (3)</li> <li>▪ SOWK 611 Leadership in the Social Work Profession and Organizations: Theory and Practice (3)</li> <li>▪ SOWK 686abc Field Practicum II (3 or 4)</li> <li>▪ Electives (12)</li> </ul>
<b>Unit System</b>	27-28 Semester Units				

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## Discussion

31% of U.S. war veterans returning from Afghanistan and Iraq seen by Veterans Affairs between 2001 and 2005 have mental health problems (defined as having a mental health diagnosis or a psychosocial problem), and of these veterans<sup>2</sup>:

- PTSD was the most common diagnosis
- Over half were diagnosed with two or more mental health problems

According to the National Institute of Mental Health:

- Approximately 7.7 million American adults age 18 and older, or about 3.5 percent of people in this age group in a given year, have PTSD.<sup>2</sup>
- About 19 percent of Vietnam veterans experienced PTSD at some point after the war.<sup>3</sup>
- Male veterans in the general U.S. population are twice as likely as their civilian peers to die by suicide<sup>4</sup>

Other issues that are common for soldiers returning from war include anxiety disorders, acute stress reaction, depression, abuse, difficulty reconnecting with families, nightmares, alcohol and/or substance abuse, aggression, and hypervigilance. Families of soldiers who are deployed or are returning from war also experience a number of challenges such as emotional detachment, difficulty with family roles and abandonment issues.

Clinical Social Workers provide services in every branch of the military and also as civilians through a range of preventive and clinical services and programs. These include the following (not an exhaustive list):

- Family and parent support groups and assistance centers.
- Counseling to deploying soldiers.
- Counseling in the field to help keep troop morale high and address mental health problems arising from the stress of battle.
- Screening and counseling of returning soldiers and their families.
- Bereavement counseling
- Mental health treatment at Veterans Administration hospitals and clinics including:
  - Inpatient residential, and outpatient mental health care
  - Programs for Homeless or Incarcerated Veterans
  - Specialized PTSD Services
  - Military Sexual Trauma
  - Psychosocial Rehabilitation & Recovery Services
  - Substance Use Disorders
  - Suicide Programs
  - Geriatrics
  - Violence Prevention

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<sup>2</sup> Seal, Karen H., M.D., MPH, et. al. "Bringing the War Back Home." Archives of Internal Medicine, March 12, 2007. [www.archinternmed.com](http://www.archinternmed.com)

<sup>3</sup> National Institute of Mental Health. "The Numbers Count – Mental Disorders in America." June 26, 2008. [www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america.shtml#Dohrenwend](http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america.shtml#Dohrenwend)

<sup>4</sup> National Institute of Mental Health. "Male Veterans Have Double the Suicide Rate of Civilians." June 12, 2007. [www.nimh.nih.gov/science-news/2007/male-veterans-have-double-the-suicide-rate-of-civilians.shtml](http://www.nimh.nih.gov/science-news/2007/male-veterans-have-double-the-suicide-rate-of-civilians.shtml)

- Evidence Based Psychotherapy Programs
- Mental Health Disaster Response/Post Deployment Activities
- Civilian outpatient mental health treatment for retirees and their dependents through Tricare.
- Training for personnel who do not work in mental health to help them recognize symptoms.

## Attachments

1. *Fact Sheet - What is PTSD?* (National Center for PTSD, 10/23/08)
2. *The Strength Within - One NCO's Experience with Suicide and PTSD* (Army News Service, 9/12/07)
3. *When Strains on Military Families Turn Deadly* (NY Times, 2/15/08)
4. *Bringing the War Back Home* (Seal, Karen et. al., Archives of Internal Medicine, 03/12/07)
5. *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery – Summary* (RAND Center for Military Health Policy Research, 2008)
6. *The Veterans Health Administration and Military Sexual Trauma* (Kimmerling, et. al., American Journal of Public Health, 12/07)
7. *Long-Term Effects of Military Service on Mental Health Among Veterans of the Vietnam War Era* (Brooks, Matthew S., Ph.D., Military Medicine, 6/08)
8. *Pentagon Report Criticizes Troops' Mental-Health Care* (Washington Post, 6/16/07)
9. *Military Diagnosing More Post-Traumatic Stress* (Washington Post, 5/28/08)
10. *Returning from the War Zone: A Guide for Military Personnel* (National Center for PTSD, 9/08)
11. *Social Workers Help Military Families* (NASW)
12. *New Focus on Military Social Work at USC* (USC Public Relations, 10/23/08)

## Other Resources:

Iraq Clinician Guide

<http://www.mentalhealth.va.gov/ptsd/alert.asp>

Report of the Department of Defense Task Force on Mental Health – June 2007

<http://www.health.mil/dhb/mhtf/MHTF-Report-Final.pdf>

Returning from the War Zone: A Guide for Families of Military Members

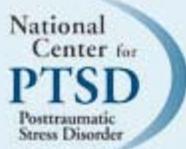
[http://ncptsd.va.gov/ncmain/ncdocs/manuals/nc\\_manual\\_returnwarz\\_gp.html](http://ncptsd.va.gov/ncmain/ncdocs/manuals/nc_manual_returnwarz_gp.html)

The Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery (RAND, Full Report)

<http://rand.org/pubs/monographs/MG720/>

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## National Center for PTSD Transitional Page



# Fact Sheets

## What is Posttraumatic Stress Disorder (PTSD)?

Posttraumatic Stress Disorder (PTSD) is an anxiety disorder that can occur after you have been through a traumatic event. A traumatic event is something horrible and scary that you see or that happens to you. During this type of event, you think that your life or others' lives are in danger. You may feel afraid or feel that you have no control over what is happening.

Anyone who has gone through a life-threatening event can develop PTSD. These events can include:

- Combat or military exposure
- Child sexual or physical abuse
- Terrorist attacks
- Sexual or physical assault
- Serious accidents, such as a car wreck.
- Natural disasters, such as a fire, tornado, hurricane, flood, or earthquake.

After the event, you may feel scared, confused, or angry. If these feelings don't go away or they get worse, you may have PTSD. These symptoms may disrupt your life, making it hard to continue with your daily activities.

## How does PTSD develop?

All people with PTSD have lived through a traumatic event that caused them to fear for their lives, see horrible things, and feel helpless. Strong emotions caused by the event create changes in the brain that may result in PTSD.

Most people who go through a traumatic event have some symptoms at the beginning. Yet only some will develop PTSD. It isn't clear why some people develop PTSD and others don't. How likely you are to get PTSD depends on many things. These include:

- How intense the trauma was or how long it lasted
- If you lost someone you were close to or were hurt
- How close you were to the event
- How strong your reaction was
- How much you felt in control of events
- How much help and support you got after the event

Many people who develop PTSD get better at some time. But about 1 out of 3 people with PTSD may continue to have some symptoms. Even if you continue to have symptoms, treatment can help you cope. Your symptoms don't have to interfere with your everyday activities, work, and relationships.

## What are the symptoms of PTSD?

Symptoms of posttraumatic stress disorder (PTSD) can be terrifying. They may disrupt your life and make it hard to continue with your daily activities. It may be hard just to get through the day.

PTSD symptoms usually start soon after the traumatic event, but they may not happen until months or years later. They also may come and go over many years. If the symptoms last longer than 4 weeks, cause you great distress, or interfere with your work or home life, you probably have PTSD.

There are four types of symptoms: reliving the event, avoidance, numbing, and feeling keyed up.

### **Reliving the event (also called re-experiencing symptoms):**

Bad memories of the traumatic event can come back at any time. You may feel the same fear and horror you did when the event took place. You may have nightmares. You even may feel like you're going through the event again. This is called a flashback. Sometimes there is a trigger: a sound or sight that causes you to relive the event. Triggers might include:

- Hearing a car backfire, which can bring back memories of gunfire and war for a combat veteran
- Seeing a car accident, which can remind a crash survivor of his or her own accident
- Seeing a news report of a sexual assault, which may bring back memories of assault for a woman who was raped

### **Avoiding situations that remind you of the event:**

You may try to avoid situations or people that trigger memories of the traumatic event. You may even avoid talking or thinking about the event.

- A person who was in an earthquake may avoid watching television shows or movies in which there are earthquakes
- A person who was robbed at gunpoint while ordering at a hamburger drive-in may avoid fast-food restaurants
- Some people may keep very busy or avoid seeking help. This keeps them from having to think or talk about the event.

### **Feeling numb:**

You may find it hard to express your feelings. This is another way to avoid memories.

- You may not have positive or loving feelings toward other people and may stay away from relationships
- You may not be interested in activities you used to enjoy
- You may forget about parts of the traumatic event or not be able to talk about them.

### **Feeling keyed up (also called hyperarousal):**

You may be jittery, or always alert and on the lookout for danger. This is known as hyperarousal. It can cause you to:

- Suddenly become angry or irritable
- Have a hard time sleeping
- Have trouble concentrating
- Fear for your safety and always feel on guard
- Be very startled when someone surprises you

## **What are other common problems?**

People with PTSD may also have other problems. These include:

- Drinking or drug problems
- Feelings of hopelessness, shame, or despair
- Employment problems
- Relationships problems including divorce and violence
- Physical symptoms

## **Can children have PTSD?**

Children can have PTSD too. They may have the symptoms described above or other symptoms depending on how old they are. As children get older their symptoms are more like those of adults.

- Young children may become upset if their parents are not close by, have trouble sleeping, or suddenly have trouble with toilet training or going to the bathroom
- Children who are in the first few years of elementary school (ages 6 to 9) may act out the trauma through play, drawings, or stories. They may complain of physical problems or become more irritable or aggressive. They also may develop fears and anxiety that don't seem to be caused by the traumatic event.

## **What treatments are available?**

When you have PTSD, dealing with the past can be hard. Instead of telling others how you feel, you may keep your feelings bottled up. **But treatment can help you get better.**

There are good treatments available for PTSD. Cognitive-behavioral therapy (CBT) is one type of counseling. It appears to be the most effective type of counseling for PTSD. There are different types of cognitive behavioral therapies such as cognitive

therapy and exposure therapy. A similar kind of therapy called EMDR, or eye movement desensitization and reprocessing, is also used for PTSD. Medications can be effective too. A type of drug known as a selective serotonin reuptake inhibitor (SSRI), which is also used for depression, is effective for PTSD.

**FOR MORE INFORMATION:**

**EMAIL - [ncptsd@va.gov](mailto:ncptsd@va.gov)**

**CALL - THE PTSD Information Line at (802) 296-6300**

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Reviewed/Updated Date: October 23, 2008

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## The Strength Within: One NCO's Experience with Suicide and PTSD

Sep 12, 2007

BY Elizabeth M. Lorge

WASHINGTON (Army News Service, Sept. 12, 2007) - In the face of rising suicide rates among Soldiers, the Army is making a renewed effort to help Soldiers at risk and educate Soldiers and leaders about the signs to look for in their battle buddies and subordinates.

That education is crucial in saving Soldiers' lives, said retired 1st Sgt. Cornell Swanier. He has first-hand experience with suicide - as a prevention-education coordinator, as a noncommissioned officer who lost a Soldier and as a combat veteran with post-traumatic stress disorder who has thought about killing himself.

On Thanksgiving Day, 2002, he got the call every leader dreads. One of the Soldiers he had brought safely through a deployment to Kuwait for Operation Enduring Freedom was dead by his own hand, an event 1st Sgt. Swanier is still trying to comprehend.

"I really got close to my Soldiers," he said. "I really tried to know the Soldiers, know their families, from top to bottom. It was tough on me. It's still tough on me to this day to walk in the barracks room and to see a dead Soldier. When Thanksgiving comes around, I think about that Soldier."

The specialist had been very intelligent, a model Soldier in a model section. He was a little quiet and prone to being picked on by his fellow Soldiers, but 1st Sgt. Swanier said he got along well with his section, one of the best in his company.

1st Sgt. Swanier said he felt responsible for a long time, but no one had any idea the Soldier wanted to kill himself. He even bought new speakers for his car shortly before he died. But he had planned the whole thing, bought a gun, even detailed where he wanted his ashes scattered in his suicide note.

After he died, 1st Sgt. Swanier went through all of the paperwork from the Soldier's monthly counseling sessions and couldn't find anything that would suggest suicide.

1st Sgt. Swanier had served as a prevention-education coordinator at Fort Benning, Ga., so he knew the signs to look for: Soldiers who start giving things away, whose job performance goes downhill, who isolate themselves and stop socializing and, of course, Soldiers who talk about killing themselves.

"You have to take that seriously. I'm sure that Soldier was exhibiting some signs around his roommate and fellow Soldiers, and they just didn't know it," he said.

The suicide, he continued, touched everyone in the close-knit unit. "It really dragged us down, put a somber mood on the unit for some time. It took us time to move forward."

The mission came first, however, and they were deployed for the initial ground war in Iraq in March 2003, a deployment that triggered 1st Sgt. Swanier's own battle with post-traumatic stress disorder and thoughts of suicide.

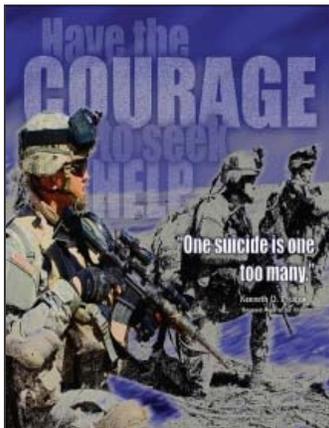
Until a year after his return, when his father mentioned how angry he was, 1st Sgt. Swanier didn't realize how PTSD was affecting his life - he had cancelled several appointments with specialists and avoided group therapy.

"There were many sleepless nights. Depressed days. I would sit in one spot for most of the day. I would isolate and I wouldn't go out. I wouldn't talk to anybody. I wouldn't answer the telephone. I would get up in the middle of the night and make sure all my doors and windows were secured," he said.

He never attempted it, but 1st Sgt. Swanier also thought about killing himself. He still does occasionally. He doesn't even like to wear neckties, although now he feels comfortable talking about it with his wife.

If it hadn't been for the conversation with his father, 1st Sgt. Swanier believes he would have lost his family and ended up divorced. Instead, he joined an outpatient program at the local Department of Veterans Affairs post-traumatic stress clinic.

"When you mention the words mental health or behavioral health, there's a stigma," he said. "And I'm a first sergeant. We were coming back and that place was full of Soldiers, no leaders. And I just couldn't see myself going to behavioral health. I'm the type of person who was used to going up there and checking on Soldiers."



Suicide Prevention Awareness Photo by Department of Army

1st Sgt. Swanier said his wife and daughter didn't understand at first, but that their support has gotten him through his treatment. Talking to other veterans who know what he's going through also helps, he said.

He tells Soldiers and leaders that they shouldn't be afraid to get help because PTSD is just like any other disease.

"We treat it and move on with our lives. This is no different. It's just a different part of our body. It starts with you, then it affects your family, then your community. There is a snowball effect if you don't get help. Because if you're going through post-traumatic stress disorder, your Family's going through secondary post-traumatic stress disorder," he said.

"If you want to help your career, get help. In the long run, if you're a leader and you have issues, you don't understand what you're doing. It'll definitely affect readiness. You're weak if you don't go. I think we're to a time now where everybody understands, okay, it's out there."

As with suicide, 1st Sgt. Swanier emphasizes the importance of education so Families, leaders, Soldiers and even Army Civilians know when to get Soldiers help and how to support them.

"I want to be able to help other Soldiers and also be an advocate for post-traumatic stress disorders. It can happen to anybody. We've got to get rid of that stigma," he said.

Under the Army Medical Action Plan, the Army is working hard to do just that. The service has launched the chain-teaching program to teach all Soldiers how to recognize the symptoms of PTSD and realize their careers are not in danger if they seek help. The Army also conducts mental-health assessments of Soldiers before, during and after deployments.

February 15, 2008

WAR TORN

## When Strains on Military Families Turn Deadly

By [LIZETTE ALVAREZ](#) and [DEBORAH SONTAG](#)

A few months after Sgt. William Edwards and his wife, Sgt. Erin Edwards, returned to a Texas Army base from separate missions in [Iraq](#), he assaulted her mercilessly. He struck her, choked her, dragged her over a fence and slammed her into the sidewalk.

As far as Erin Edwards was concerned, that would be the last time he beat her.

Unlike many military wives, she knew how to work the system to protect herself. She was an insider, even more so than her husband, since she served as an aide to a brigadier general at Fort Hood.

With the general's help, she quickly arranged for a future transfer to a base in New York. She pressed charges against her husband and secured an order of protection. She sent her two children to stay with her mother. And she received assurance from her husband's commanders that he would be barred from leaving the base unless accompanied by an officer.

Yet on the morning of July 22, 2004, William Edwards easily slipped off base, skipping his anger-management class, and drove to his wife's house in the Texas town of Killeen. He waited for her to step outside and then, after a struggle, shot her point-blank in the head before turning the gun on himself.

During an investigation, Army officers told the local police that they did not realize Erin Edwards had been afraid of her husband. And they acknowledged that despite his restrictions, William Edwards had not been escorted off base "on every occasion," according to a police report.

That admission troubled the detective handling the case.

"I believe that had he been confined to base and had that confinement been monitored," said Detective Sharon L. Brank of the local police, "she would not be dead at his hands."

The killing of Erin Edwards directly echoed an earlier murder of a military wife that drew far more attention. Almost 10 years ago, at Fort Campbell in Kentucky, a different Army sergeant defied a

similar restriction to base, driving out the front gate on his way to a murder almost foretold.

That 1998 homicide, one of several featured in a “60 Minutes” exposé on domestic violence in the military, galvanized a public outcry, Congressional demands for action and the Pentagon’s pledge to do everything possible to prevent such violence from claiming more lives.

Yet just as the Defense Department undertook substantial changes, guided by a Congressionally chartered task force on domestic violence that decried a system more adept at protecting offenders than victims, the wars in [Afghanistan](#) and then Iraq began.

Pentagon officials say that wartime has not derailed their efforts to make substantive improvements in the way that the military tackles domestic violence.

They say they have, for example, offered more parenting and couples classes, provided additional victims advocates and afforded victims greater confidentiality in reporting abuses.

But interviews with members of the task force, as well as an examination of cases of fatal domestic violence and child abuse, indicate that wartime pressures on military families and on the military itself have complicated the Pentagon’s efforts.

“I don’t think there is any question about that,” said Peter C. McDonald, a retired district court judge in Kentucky and a member of the Pentagon’s now disbanded domestic violence task force. “The war could only make things much worse than even before, and here we had a system that was not too good to begin with.”

Connie Sponsler-Garcia, another task force member, who now works on domestic violence projects with the Pentagon, agreed.

“Whereas something was a high priority before, now it’s: ‘Oh, dear, we have a war. Well get back to you in a few months,’ ” she said.

The fatalities examined by The New York Times show a military system that tries and sometimes fails to balance the demands of fighting a war with those of eradicating domestic violence.

According to interviews with law enforcement officials and court documents, the military has sent to war service members who had been charged with and even convicted of domestic violence crimes.

Deploying such convicted service members to a war zone violates military regulations and, in some cases, federal law.

Take the case of Sgt. Jared Terrasas. The first time that he was deployed to Iraq, his prosecution for domestic violence was delayed. Then, after pleading guilty, he was pulled out of a 16-week batterers intervention program run by the Marine Corps and sent to Iraq again.

Several months after Sergeant Terrasas returned home, his 7-month-old son died of a brain injury, and the marine was charged with his murder.

Deployment to war, with its long separations, can put serious stress on military families. And studies have shown that recurrent deployments heighten the likelihood of combat trauma, which, in turn, increases the risk of domestic violence.

“The more trauma out there, the more likely domestic violence is,” said Dr. Jacquelyn C. Campbell, a professor at the Johns Hopkins School of Nursing who also was a member of the Pentagon task force.

The Times examined several cases in which mental health problems caused or exacerbated by war pushed already troubled families to a deadly breaking point.

In one instance, the Air Force repeatedly deployed to Iraq, Afghanistan and elsewhere Sgt. Jon Trevino, a medic with a history of psychological problems, including post-traumatic stress disorder.

Multiple deployments eroded Sergeant Trevino’s marriage and worsened his mental health problems until, in 2006, he killed his wife, Carol, and then himself.

The military declared his suicide “service related.”

### A Call to Action

Within a six-week period in 2002, three Special Forces sergeants returned from Afghanistan and murdered their wives at Fort Bragg in North Carolina. Two immediately turned their guns on themselves; the third hanged himself in a jail cell. A fourth soldier at the same Army base also killed his wife during those six weeks.

At the beginning of this wartime period, the cluster of murder-suicides set off alarms about the possible link between combat tours and domestic violence, a link supported by a study published that year in the journal *Military Medicine*. The killings also reinvigorated the concerns about military domestic violence that had led to the formation of the Defense Task Force on Domestic Violence two years earlier.

National attention to the subject was short-lived. But an examination by The Times found more than 150 cases of fatal domestic violence or child abuse in the United States involving service members and

new veterans during the wartime period that began in October 2001 with the invasion of Afghanistan.

In more than a third of the cases, The Times determined that the offenders had deployed to Afghanistan or Iraq or to the regions in support of those missions. In another third, it determined that the offenders never deployed to war. And the deployment history of the final third could not be ascertained.

The military tracks only homicides that it prosecutes, and a majority of killings involving service members are handled by civilian authorities. To track these cases, The Times used records from the Army, Air Force and Navy — the Marines did not provide any information —and local news reports.

It is difficult to know how complete The Times's findings are. What is clear, though, is that these homicides occurred at a time when the military was trying to improve its handling of domestic violence.

The Pentagon's domestic violence task force, appointed in April 2000 and comprising 24 military and civilian experts, met regularly for three years to examine a system where, they found, soldiers rarely faced punishment or prosecution for battering their wives and where they often found shelter from civilian orders of protection.

When the moment arrived to explain their findings and recommendations to Congress, however, the timing could not have been poorer. Deborah D. Tucker and Lt. Gen. Garry L. Parks of the Marines, the leaders of the task force, presented their final report to the House Armed Services Committee on the very day that the Iraq war began, March 20, 2003. Ms. Tucker called it "one of the more surreal experiences of my life."

"Periodically, members of the committee would call for a break and there would be some updated information provided on the status of our troops' entry into Iraq and how far they'd gotten," she said. "There was a map on an easel to the side."

"I knew that while we were at war all other considerations would push back," she added, "and I hoped that Operation Iraqi Freedom would be a quick matter on the order of Desert Storm."

The task force was disbanded, and its request to reconvene after two years to evaluate progress was rejected. But the Defense Department embraced most of its 200 recommendations and gradually made many changes, from the increase in advocates to domestic violence training for commanding officers.

"The services have taken huge strides to implement the recommendations," said David Lloyd, director

of the Pentagon's Family Advocacy Program, starting with sending out "a strong message across the department that domestic violence is not acceptable."

Further, after the killings at Fort Bragg, Congress passed a law that made civilian orders of protection binding on military bases, and the Army gradually slowed the transition from war to home to help soldiers adjust.

Mr. Lloyd said he could not verify or comment on The Times's findings on domestic killings. But, he said, domestic fatalities do not provide a complete picture of the incidence of domestic violence in the military.

"You have a pie, a nine-inch shell, and you have a slice of that pie, but there are other slices: verbal abuse and psychological control and assault that didn't result in a homicide," Mr. Lloyd said. "Even if the fatality slice has increased and it would look larger, the other numbers have gone down."

According to the military, the number of general spouse and child abuse incidents reported to on-base family advocacy programs began declining in 1998, before the special effort to address the issue began, and continued to decline significantly through 2006. But whether those numbers reflect a genuine decline is a matter of debate, given that large numbers of service members have spent considerable time away on deployments and that the strengthening of sanctions for domestic violence has made some women more reluctant to report abuse.

The accuracy of the military's domestic violence data has also been questioned, by advocates, the [Government Accountability Office](#) and military officials themselves.

Last fall, in a statement released during domestic violence awareness month, Mike Hoskins, a Pentagon official, said, "We shouldn't necessarily take comfort in reduced rates of violence." He said they probably reflected "good news" but urged caution in interpreting the numbers.

Dr. Campbell, the former task force member, said the task force had recommended periodic anonymous surveys to ascertain the full extent of domestic violence. She also said that she believed the "true incidence" of domestic violence had probably increased as a result of service members returning from Iraq with combat trauma, which can exacerbate family violence.

"It's sort of like, on the one hand, they're improving the system, and on the other hand, they're stressing it," she said.

Others agree, noting that wartime places a burden on the military as a whole, even on those who do not deploy to combat zones but absorb additional duties at home.

Christine Hansen, executive director of the Miles Foundation, which provides domestic violence assistance mostly to the wives of officers and senior enlisted men, said the organization's caseload had tripled since the war in Iraq began.

And John P. Galligan, a retired Army colonel who served as a military judge at Fort Hood and now represents military clients in private practice, said he, too, had seen a "substantial" increase in military domestic violence cases in his area.

"Sometimes I just sit and scratch my head," he said.

The separation of deployment, in and of itself, often causes marital strains.

"Even with a healthy marriage, there is a massive adjustment," said Anita Gorecki, a lawyer and former Army captain who represents soldiers near Fort Bragg and is married to an officer currently in Iraq. "Add on to that combat stress and injuries and sometimes it can create the perfect storm."

Some researchers draw a fairly firm connection between post-traumatic stress disorder and domestic violence. A 2006 study in *The Journal of Marital and Family Therapy* looked at veterans who sought marital counseling at a Veterans Affairs medical center in the Midwest between 1997 and 2003. Those given a diagnosis of PTSD were "significantly more likely to perpetrate violence toward their partners," the study found, with more than 80 percent committing at least one act of violence in the previous year, and almost half at least one severe act.

Pamela Iles, a superior court judge who was permitted by the Marines to set up a privately financed domestic violence education program at Camp Pendleton in California, views much of the domestic abuse on the base as "collateral" from the war. She sees the domestic violence committed by marines, many of them young, as a reaction to jumping back and forth between the dangers of war and the trouble at home.

"One minute you are in Baghdad waiting for a bomb to go off and the next minute you are in Burger King," Judge Iles said. "There is a lot of disorientation."

#### A 9-Year-Old Witness

It was a little before dawn on Feb. 20, 2006, in a bedroom in Edwardsville, Ill. Carol Trevino and her 9-year-old son, sleeping deeply after watching "Wayne's World," were startled awake by a series of booms. "What was that?" Carol Trevino asked her son.

In seconds, Sgt. Jon Trevino, her estranged husband, barged through the door, according to a police report. Mrs. Trevino had just enough time to reach for her pepper spray before he shot her five times,

the last time in the head. Then he shot himself.

Their son, wide-eyed, sat in bed watching his life explode, bullet by bullet.

Few details escaped the boy's notice. His father used a silver gun and it "didn't have a wheel on it, like the cowboys used," he told the Edwardsville police. The boy could even name the precise time of his mother's death: 4:32 a.m., as the glowing clock read.

Outside in Mr. Trevino's car was the immediate motive for the murder-suicide: divorce papers, evidence of a marriage destabilized by multiple deployments to war zones and by Sergeant Trevino's own increasing instability.

T. Robert Cook, his brother-in-law, said he believed Sergeant Trevino's domestic violence was triggered by his combat trauma. "I'm 100 percent sure it was the war," said Mr. Cook, who is raising the Trevinos' son along with his wife, Cheryl Lee, who is Carol's sister. "I don't have any doubt their marital problems placed a burden on him, but I am quite sure that, but for the war, he would have taken a different approach. When you see people being shot every day, death is not a big thing."

Sergeant Trevino, who had endured childhood sexual abuse and a difficult first marriage, suffered psychiatric problems long before he was dispatched to war zones to perform the highly stressful job of evacuating the wounded.

And the Air Force knew it.

Air Force mental health records show that Sergeant Trevino, who was 36, had been treated twice for mental health problems before the war: once in 1995 for serious depression as his first marriage crumbled, and then in 1999 for post-traumatic stress disorder stemming from the childhood abuse and marital problems with his new wife, Carol. He was counseled and treated with medication both times.

As a result of these problems, the Air Force insisted that he secure a medical waiver for a promotion that he sought to become an aeromedical evacuation technician. And military doctors certified that he could handle the job, despite research that shows that pre-existing post-traumatic stress disorder is exacerbated in a war zone.

Col. Steven Pflanz, a senior psychiatrist in the Air Force, who was not involved in the Trevino case, said the Air Force considered the stress disorder to be treatable and therefore was willing to deploy an airman with a history of it. But the decision is not taken lightly, he said.

"It's not an exact science," he said. "You try to make your best prediction. We spend a lot of time with

our customers.”

In Sergeant Trevino’s case, the prediction was wrong. He had trouble shaking off the carnage that he experienced so viscerally while evacuating injured service members. After one deployment to Afghanistan and two to Iraq, his mental health and his marriage deteriorated. When he returned from his second tour in Iraq, Sergeant Trevino acknowledged in a health assessment that he had “serious problems” dealing with the people he loved and that he was feeling “down, helpless, panicky or anxious.”

The Air Force acted quickly. He was abruptly restricted from “special operational duty.” An Air Force doctor diagnosed “acute PTSD,” calling it a reaction to the war and marital problems. Sergeant Trevino began taking a cocktail of antidepressants and underwent therapy. According to doctors’ notes, he did not express thoughts of homicide or suicide. By the time [Hurricane Katrina](#) hit the Gulf Coast in August 2005, he was considered well enough to be deployed domestically.

But his wife’s family, which had taken him under its wing, found the once affable, quick-witted sergeant to be profoundly altered. His temper flashed unpredictably, white-hot. He acted threatened and paranoid, his behavior so erratic that he frightened his son. One late night, he took his son on a rambling drive to nowhere, ranting to the boy about his mother.

At least one time, he struck his wife. A friend gave Carol Trevino the pepper spray that she reached for the night of her murder. But she never considered his abuse serious enough to report him to the authorities.

Four days before the murder-suicide, Sergeant Trevino bought a gun.

“This is just one of those things that unfortunately happens,” he wrote to his son in a suicide note. “I love you, and I know I let you down.”

### Justice Delayed

The Pentagon task force had one overarching recommendation: that the military work hard to effect a “culture shift” to zero tolerance for domestic violence by holding offenders accountable and by punishing criminal behavior.

There was, members believed, a core credo that needed to be attacked frontally: “this notion that the good soldier either can’t be a wife beater or, if they are, that it’s a temporary aberration that shouldn’t interfere with them doing military service,” as Dr. Campbell put it.

The way the military handled several cases involving the deaths of babies and toddlers indicates that

this kind of thinking has been difficult to demolish at a time of war.

In October 2003, four months after Jose Aguilar, 24, a Marine Corps sergeant, returned from the initial invasion of Iraq, his infant son, Damien, wound up in the intensive care unit of a local hospital with bleeding in his brain and eyes.

Sergeant Aguilar, a mechanic based at Camp Lejeune in North Carolina, acknowledged to the local police that he had been rough with the 2-month-old baby, shaking Damien to stop him from squirming during a diaper change. He said that he had been abused himself as a child and that he did not mean to hurt the baby.

After the marine was charged with felony child abuse, he and his wife completed a parenting program.

The following summer, while the felony charge was pending, Sergeant Aguilar was deployed once more to Iraq, this time for nine months. His court case was delayed, which did not surprise local prosecutors.

Michael Maulsby, the assistant district attorney in Onslow County, N.C., who prosecuted Sergeant Aguilar, said that such frustrating delays in justice sometimes occur in his county, home to Camp Lejeune.

“It depends on the needs of the unit,” Mr. Maulsby said. “We can’t overrule them.”

In April 2006, a year after Sergeant Aguilar returned from Iraq but before his felony case was resolved, Damien, who by then was 2, died of a brain injury. His father claimed that the boy had been injured by a fall in the bathtub. The medical examiner disputed that explanation. The marine was arrested, pleaded guilty to second-degree murder and felony child abuse, and was sentenced last fall to 28 to 35 years in prison.

Marine officials would not comment on individual cases. Elaine Woodhouse, a Marine Corps social services program specialist, said that “the family advocacy program does not recommend or advise deployment of a marine when domestic or felony child abuse charges are pending.” Still, that decision, she said, is left to the discretion of the commanders.

A conviction for domestic violence, unlike pending charges, almost always renders a service member ineligible to go to war, but that restriction has not always been considered binding, as is clear in the case of Sergeant Terrasas, who was stationed at Camp Pendleton.

One night in late December 2002, Sergeant Terrasas, drunk and angry over a telephone conversation about the looming war in Iraq, vented his anger by punching his wife, Lucia, in the face.

“He seemed to just lose it,” Mrs. Terrasas told the police in Oceanside, Calif., who arrested him on misdemeanor charges.

But Sergeant Terrasas was deployed to Iraq before his case was heard. It was not until his return seven months later that he pleaded guilty, was placed on probation and was ordered to complete a 16-week batterers intervention program run by the Marine Corps.

Sergeant Terrasas attended a few classes. But the Marine Corps, facing a runaway insurgency in Iraq, pulled him out of the batterers program and shipped him off to war for a second time in early 2004.

This deployment was illegal. A 1996 law bans offenders who are convicted of domestic violence misdemeanors from carrying firearms, with no special exception for military personnel. The ban is referred to as the Lautenberg amendment after its sponsor, Senator [Frank R. Lautenberg](#), Democrat of New Jersey.

Army and Marine regulations, formulated in response to the weapons ban, explicitly prohibit deployments for missions that require firearms, and extend the policy to felony domestic violence offenders, too. The Marine Corps would not comment on Sergeant Terrasas’s deployment, citing confidentiality rules.

When Sergeant Terrasas returned from war, he completed his batterers program, said his lawyer, Philip De Massa. But his anger, tested by two tours in Iraq, still surfaced. In September 2005, when the police responded to a domestic argument, he broke down crying and told one officer that he suffered from “postwar traumatic syndrome.” There is no record that he sought or received mental health help.

Nearly two weeks later, the Terrasases’ 7-month-old son, Alexander, died from a powerful blow to the head. Mr. Terrasas was charged with murder. Last August, after a deal with prosecutors, he was sentenced to seven years in prison for felony child endangerment.

He never admitted to abusing his child.

### Broken Promises

Sgt. Erin Edwards, emboldened by a year in Iraq, returned to Texas with the courage to end her troubled marriage.

“Being apart for such a long period of time enabled her to realize she could survive without him,” said Sgt. Jami Howell, 28, who was her best friend.

When Erin Edwards told her husband that she wanted a divorce after four years of marriage, he responded as she had long feared.

On June 19, 2004, he followed her to their baby sitter's house to hand her a written proposal for a custody arrangement. When she did not immediately respond, he beat her so badly that she wound up in the emergency room.

Even before the assault, William Edwards's troubles had so badly affected his performance at work that his commanding officer, Capt. Brian Novoselich, took the time to meet with him weekly to check on his welfare. After the assault, it was the captain who confined him to the base.

But William Edwards repeatedly left unescorted and often stayed with his brother, who lived across the street from Erin Edwards in Killeen. On several occasions, she alerted the police and his superiors that he was lurking.

On July 21, 2004, Erin Edwards went to court to make the temporary protection order permanent. At the hearing, William Edwards told the judge that he had enrolled in alcohol and domestic violence classes after the June assault, according to a transcript.

"I had hit rock bottom when I touched my wife, man," he said in court. "That was the worst day ever in my life. I had always told my wife that I would never touch her, ever, physically."

William Edwards also acknowledged that when the police showed up that day, he begged his wife not to press charges, saying: "Don't do this to my career. Don't do this."

Erin Edwards spoke of the effect on their children, who witnessed the assault. "Since the incident happened, all my son talks about is how his father hurt his mother, and that 'Daddy is going to kill Mommy,'" she said.

She also stated, and her husband learned for the first time, that she was transferring and moving with the children. William Edwards was "visibly upset" by this, according to Army documents turned over to the police.

The following morning, after reporting to an exercise session with other soldiers, William Edwards left the base alone one final time. After the murder-suicide, local police officers securing the scene noted that both bodies were dressed in military camouflage clothing with nameplates that said Edwards. Both were 24.

At Erin Edwards's funeral, her boss, Brig. Gen. Charles Benjamin Allen, who was killed in a helicopter crash in late 2004, eulogized the soldier with a cracking voice. More than three years later, her

relatives note that not even he, with his high rank, was able to ensure that the military was doing more than taking a troubled soldier “at his word,” as Mary Lou Taylor, Erin’s aunt, said.

“He couldn’t or failed to help her be safe,” Ms. Taylor said.

William Edwards’s former commanding officer, Major Novoselich, said in a recent interview that he was “shocked by the end result.” Now a professor at [West Point](#), he said he had assumed that William Edwards’s immediate supervisors were monitoring him.

Near Fort Hood, Detective Brank of the Killeen police said soldiers continued to defy restrictions to the base.

“I am surprised,” she said. “Fort Hood is not enforcing these orders.”

The Army examined Erin Edwards’s death as part of a fatality review program recommended by the Pentagon task force “to ensure no victim dies in vain.”

A one-paragraph summary of the review seemed to discount the findings of the civilian police investigation. The summary noted that Erin Edwards had refused the assistance of the base’s family advocacy program, while William Edwards had enrolled in it. It added that William Edwards had “appeared to comply” with his restrictions. Until the day he “eluded his military escort” and killed his wife.

*Alain Delaqu erie and Margot Williams contributed research.*

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# Bringing the War Back Home

## Mental Health Disorders Among 103 788 US Veterans Returning From Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities

Karen H. Seal, MD, MPH; Daniel Bertenthal, MPH; Christian R. Miner, PhD; Saunak Sen, PhD; Charles Marmar, MD

**Background:** Veterans of Operations Enduring Freedom and Iraqi Freedom (OEF/OIF) have endured high combat stress and are eligible for 2 years of free military service–related health care through the Department of Veterans Affairs (VA) health care system, yet little is known about the burden and clinical circumstances of mental health diagnoses among OEF/OIF veterans seen at VA facilities.

**Methods:** US veterans separated from OEF/OIF military service and first seen at VA health care facilities between September 30, 2001 (US invasion of Afghanistan), and September 30, 2005, were included. Mental health diagnoses and psychosocial problems were assessed using *International Classification of Diseases, Ninth Revision, Clinical Modification* codes. The prevalence and clinical circumstances of and subgroups at greatest risk for mental health disorders are described herein.

**Results:** Of 103 788 OEF/OIF veterans seen at VA health care facilities, 25 658 (25%) received mental health di-

agnosis(es); 56% of whom had 2 or more distinct mental health diagnoses. Overall, 32 010 (31%) received mental health and/or psychosocial diagnoses. Mental health diagnoses were detected soon after the first VA clinic visit (median of 13 days), and most initial mental health diagnoses (60%) were made in nonmental health clinics, mostly primary care settings. The youngest group of OEF/OIF veterans (age, 18-24 years) were at greatest risk for receiving mental health or posttraumatic stress disorder diagnoses compared with veterans 40 years or older.

**Conclusions:** Co-occurring mental health diagnoses and psychosocial problems were detected early and in primary care medical settings in a substantial proportion of OEF/OIF veterans seen at VA facilities. Targeted early detection and intervention beginning in primary care settings are needed to prevent chronic mental illness and disability.

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**R**ECENT MILITARY OPERATIONS in Iraq and Afghanistan represent the most sustained ground combat operations involving American forces since the Vietnam era.<sup>1,2</sup> The majority of military personnel experience high-intensity guerrilla warfare and the chronic threat of roadside bombs and improvised explosive devices.<sup>1,2</sup> Some soldiers endure multiple tours of duty, many experience traumatic injury, and more of the wounded survive than ever before.<sup>3-5</sup> Reports have suggested high rates of mental health disorders including posttraumatic stress disorder (PTSD), depression, and alcohol use disorders among active duty military personnel and veterans of Operation Iraqi Freedom (OIF) and, to a lesser extent, Operation Enduring Freedom (OEF).<sup>3,5-7</sup>

Separated OEF/OIF veterans are eligible for 2 years of free military service–

related health care through the Department of Veterans Affairs (VA). Nevertheless, there have been no recent detailed reports in the medical literature to describe the prevalence of single and co-occurring mental health diagnoses and psychosocial problems among OEF/OIF veterans seen at VA facilities after returning from Iraq and Afghanistan. This information is critical to developing targeted programs for early detection and intervention to prevent chronic mental illness among OEF/OIF veterans. The aim of this study was to (1) describe the proportion of OEF/OIF veterans seen in VA facilities who have received single or multiple mental health and/or psychosocial diagnoses and the timing and clinical setting of first mental health diagnoses and (2) identify subgroups of OEF/OIF veterans at high risk for receiving mental health diagnoses after returning from military service in Iraq and/or Afghanistan.

## STUDY POPULATION

The present study includes OEF/OIF veterans who are new users of the VA health care system and included in the VA OEF/OIF Roster database (N=165 351 as of November 1, 2005, when we accessed the OEF/OIF Roster).<sup>8</sup> For an OEF/OIF veteran to be included in the VA OEF/OIF Roster, the veteran must (1) be listed in the most recent enrollment file provided by the VA Health Eligibility Center or have had a VA clinic visit and/or (2) be included in the US Department of Defense, Defense Manpower Data Center database. The Defense Manpower Data Center database of the Department of Defense lists veterans separated from OEF/OIF service, and as of November 2005, 29% had accessed VA health care.<sup>9</sup> Approximately half of the VA OEF/OIF Roster derives from both sources (Defense Manpower Data Center and VA Health Eligibility Center), and about half derives from Defense Manpower Data Center only.

More than half (53%) of the veterans included in the roster lacked OEF/OIF service separation dates. Because we were interested in mental health diagnoses and psychosocial problems associated with military service in Iraq and Afghanistan, we defined our study population as veterans first seen at a VA facility after September 30, 2001 (the date of the US invasion of Afghanistan) through December 31, 2005, but excluded veterans listed in the VA OEF/OIF Roster if they (1) were listed in the VA Health Eligibility Center database only (n=6369) (because OEF/OIF service could not be corroborated with Department of Defense data), (2) had a visit to a VA facility before September 30, 2001 (n=24 172), or before to their OEF/OIF service separation date (n=16 087), and (3) had not been seen at a VA facility by September 30, 2005 (n=14 810). The study was approved by the Committee on Human Research, University of California, San Francisco, and the San Francisco VA Medical Center.

## SOURCE OF DATA

The VA OEF/OIF Roster includes information on veterans' sex, race, date of birth, service separation date, and armed forces component (National Guard or Reserve vs active duty). Both components are voluntary, although active duty members join as full-time personnel, whereas members of the National Guard and Reserve join as part-time personnel who then become full-time when called to duty.

Encrypted social security numbers of 103 788 OEF/OIF veterans listed in the OEF/OIF Roster database were used to link to VA administrative and clinical data contained within the VA National Patient Care Database (NPCD) and Fee Basis records. National VA databases have been used extensively in epidemiological studies to describe patterns of disease and health care utilization among veterans.<sup>10,11</sup> Clinical data contained within the VA NPCD are derived from outpatient and inpatient visits to any of the nearly 1300 VA health care facilities nationwide, and fee basis records represent care rendered at other health care facilities reimbursed by the VA. For all VA visits, an electronic record is generated that includes the date of the visit, outpatient clinic or inpatient type, and the diagnosis(es) associated with the visit coded using the *International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)* codes. Mental health clinic visits were defined as all outpatient and inpatient visits to mental health and substance abuse services, while nonmental health visits were either outpatient visits or inpatient admissions to nonmental health services. Currently, available VA databases lacked data regarding income, education, duration of military service, military rank, branch, and pay grade for OEF/OIF veterans.

The ICD-9-CM codes associated with specific VA inpatient and outpatient visits were used to categorize mental health diagnoses as they accrued from the date of the first VA visit to December 31, 2005. We allowed for up to 10 distinct ICD-9-CM codes for each inpatient or outpatient encounter. Mental health diagnoses were defined as any ICD-9-CM diagnosis from 290.0 to 319.0, corresponding to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Revised (DSM-IV-R)*.<sup>12</sup> In addition, we examined several individual ICD-9-CM mental health diagnostic categories that have been associated with military service<sup>2,3,5,13</sup>: anxiety disorders, PTSD, depressive disorders, substance use disorders (which included alcohol and illicit drug abuse and dependence but excluded nicotine dependence), acute stress reaction, adjustment disorders, and other mental health diagnoses. The category "other mental health diagnoses" comprised all ICD-9-CM mental health diagnoses excluding the military service-related categories listed previously. The category "psychosocial or behavioral problems" consisted of selected ICD-9-CM V-codes, a supplementary classification used to describe problems that are a focus for mental health treatment but are not considered mental health diagnoses.<sup>14,15</sup> Because ICD-9-CM codes may be considered provisional or "rule-out" diagnoses, we evaluated the proportion of diagnoses that were assigned on 2 or more separate clinical encounters. Also, if a mental health diagnosis was initially made in a nonmental health care setting, we determined the proportion that subsequently received the same mental health diagnosis at a follow-up mental health visit.

## STATISTICAL ANALYSES

This was a descriptive analysis of the prevalence, clinical setting, and timing of mental health diagnoses among OEF/OIF veterans who were new users of VA health care. We also determined the relative risks (RRs) and 95% confidence intervals (CIs) of receiving mental health diagnoses associated with various sociodemographic and military service characteristics. Because of the large sample size, nearly all comparisons between subgroups were statistically significant, and for this reason, we examined effect sizes to determine what constituted clinically meaningful differences between subgroups. Moreover, because the measured demographic characteristics (eg, age) may serve as markers for other unmeasured characteristics (eg, combat exposure) and the relationships between measured and unmeasured covariates are complex, multivariable adjustment has the potential to mislead. Instead, we calculated stratum-specific RRs (using strata defined by combinations of observed characteristics), enabling us to identify subgroups of OEF/OIF veterans at increased risk for receiving mental health and PTSD diagnoses. All statistical analyses were conducted using STATA software, version 8.2 (StataCorp, College Station, Tex).

## RESULTS

## CHARACTERISTICS AND VA HEALTH SERVICES UTILIZATION OF OEF/OIF VETERANS

**Table 1** gives the sociodemographic and military service-related characteristics of 103 788 OEF/OIF veterans seen at VA facilities nationwide. A substantial minority were women (13%); more than half were younger than 30 years (54%); nearly one third were members of ethnic minority groups; and nearly half were veterans of the National Guard or Reserve components.

Service separation data were available for 47% of the study population, and of these, the median time from OEF

**Table 1. Characteristics of OEF/OIF Veterans Seen at VA Health Care Facilities**

Characteristic	No. (%) of Veterans (n = 103 788)
Sex	
Male	90 117 (87)
Female	13 652 (13)
Age, y	
18-24	27 167 (26)
25-29	29 185 (28)
30-39	22 230 (22)
≥40	25 206 (24)
Race	
White	68 765 (69)
Black	18 165 (18)
Hispanic	11 410 (11)
Other*	2 155 (2)
Marital status†	
Never married	35 249 (47)
Married	32 434 (43)
Divorced	7 124 (10)
Separated or widowed	267 (0.4)
Service type	
Active duty	54 387 (52)
National Guard/Reserve	49 401 (48)
Service end date‡	
Oct 2001–Nov 2002	282 (0.6)
Nov 2002–Oct 2003	4803 (10)
Nov 2003–Oct 2004	24 239 (50)
Nov 2004–Oct 2005	19 165 (40)

Abbreviations: OEF/OIF, Operations Enduring Freedom and Iraqi Freedom; VA, Department of Veterans Affairs.

\*Race categories in the OEF/OIF Roster are crude. "Other" refers to ethnic minority groups other than blacks and Hispanics.

†A total of 28 714 veterans (28%) lacked data for marital status.

‡A total of 55 299 veterans (53%) lacked data for service end date.

or OIF service separation to the first VA clinic visit was 2.9 months (intraquartile range [IQR], 1.3-6.0 months). Among all 103 788 OEF/OIF veterans, the median time in the VA system from the first VA clinic visit until the study end date (December 30, 2005) was 7.8 months (IQR, 2.9-14.5 months). Most (103 520 [99.7%]) had a clinic visit to a VA facility, while 9941 (10%) had visits to outside facilities reimbursed by the VA. Nearly all OEF/OIF veterans (103 734 [99%]) had an outpatient visit, while 3213 (3%) also had an inpatient visit.

#### MENTAL HEALTH SERVICES UTILIZATION AND TIME TO FIRST MENTAL HEALTH DIAGNOSIS

Of 103 788 OEF/OIF veterans, 25 396 (25%) had an outpatient mental health visit during the study period. Of note, 5059 OEF/OIF veterans (5%) were seen in mental health clinics but did not receive a mental health diagnosis. Of the 3213 OEF/OIF veterans with an inpatient visit, 1390 (43%) were admitted with the primary diagnosis of a mental health disorder. The median time from the first VA visit to the first mental health diagnosis was 13 days (IQR, 0-118 days). Of those receiving mental health diagnoses, 10 394 (41%) received mental health diagnoses on their first VA clinic visit.

#### MENTAL HEALTH DIAGNOSES AMONG OEF/OIF VETERANS SEEN AT VA FACILITIES

**Table 2** gives the mental health diagnoses among 103 788 OEF/OIF veterans. Overall, 25 658 (25%) received 1 or more distinct mental health diagnoses. The median number of different diagnoses was 3 (IQR, 1-7); 44% had a single mental health diagnosis, 29% had 2 different diagnoses, and 27% had 3 or more different mental health diagnoses. Of those receiving mental health diagnoses, 18 582 (72%) had the same diagnosis made at 2 or more separate encounters. The single most common mental health diagnosis was PTSD, coded in 13 205 OEF/OIF veterans, representing 52% of those receiving mental health diagnoses and 13% of all OEF/OIF veterans in our study population. When we broadened our definition of "mental health problems" to include those with a mental health diagnosis and/or those receiving a V-code, representing a psychosocial problem, overall, 32 010 OEF/OIF veterans (31%) were coded as having "mental health problems."

#### CLINICAL SETTING OF MENTAL HEALTH DIAGNOSES AMONG OEF/OIF VETERANS

Table 2, columns 2 and 3, gives the proportions of veterans with mental health diagnoses and psychosocial problems (V-codes) that were assessed in mental health vs nonmental health settings. The majority of all mental health diagnoses (60%) were first made in nonmental health settings; 42% were made in primary care settings; and 18% were made in other settings.

Table 2, column 4, gives the proportions of veterans having a subsequent mental health visit if the initial mental health diagnosis occurred in a nonmental health setting. Column 5 shows the proportion of these subsequent mental health visits that resulted in the same mental health diagnosis as first assigned in the nonmental health setting. Overall, of veterans first receiving mental health diagnoses in nonmental health settings, the majority (61%) subsequently had a mental health visit, and 92% of these veterans received the same mental health diagnosis first made in the nonmental health setting.

#### PREDICTORS FOR RECEIVING MENTAL HEALTH DIAGNOSES

**Table 3** shows that, with the exception of age subgroups, differences across subgroups of OEF/OIF veterans regarding risk for receiving mental health or PTSD diagnoses were minimal. **Figure 1** illustrates that the absolute mean difference among racial subgroups and between male and female veterans varied by no more than 2%. When stratified by component (active duty vs National Guard and Reserve), **Figure 2** shows that among veterans of active duty service, those in the younger age groups were at higher risk of receiving mental health and PTSD diagnoses compared with those in the oldest age group (≥40 years) (*P* value for trend, <.01). The youngest group of active duty veterans (age, 18-24 years) had a significantly higher risk of receiving 1 or more mental health diagnoses (RR, 3.32; 95% CI, 3.12-3.54) and PTSD

**Table 2. Mental Health (MH) Diagnoses and Psychosocial/Behavioral Problems Among OEF/OIF Veterans Seen at VA Health Care Facilities\***

Diagnosis	OEF/OIF Veterans (N = 103 788)	OEF/OIF Veterans With First MH Diagnosis in Non-MH Setting	MH Visit If First MH Diagnosis in Non-MH Setting	Same MH Diagnosis on MH Visit If First Diagnosis in Non-MH Setting
≥1 MH diagnosis(es)*†	25 658/103 788 (25)	15 347/25 658 (60)	9287/15 347 (61)	8543/9287 (92)
1 MH diagnosis	11 319 (44)	...	...	...
2 MH diagnoses	7342 (29)	...	...	...
≥3 MH diagnoses	6997 (27)	...	...	...
MH diagnosis‡	...	...	...	...
PTSD	13 205 (13)	5844 (44)	4198 (72)	3925 (94)
Anxiety disorder	6267 (6)	3131 (50)	2014 (64)	1897 (94)
Adjustment disorder	5936 (6)	1451 (24)	857 (59)	780 (91)
Depression	5405 (5)	1456 (27)	1018 (70)	966 (95)
Substance use disorder	4878 (5)	2419 (50)	1396 (58)	1310 (94)
Other MH diagnosis(es)§	12 447 (12)	8141 (65)	5157 (63)	4795 (93)
V-code diagnosis(es)	13 211 (13)	9333 (71)	3172 (34)	2683 (85)
Total with MH and/or V-code diagnoses	32 010 (31)	21 447 (67)	10 386 (48)	9302 (90)

Abbreviations: OEF/OIF, Operations Enduring Freedom and Iraqi Freedom; PTSD, posttraumatic stress disorder; VA, Department of Veterans Affairs.  
 \*Data are given as number (percentage) of veterans. The first row shows denominators to demonstrate how the table is constructed. Column 1 gives MH diagnoses among 103 788 OEF/OIF veterans. Column 2 gives row percentages to describe the proportion of OEF/OIF veterans who received their first MH diagnosis in a non-MH setting. The last 2 columns give row percentages to describe the proportion of OEF/OIF veterans who had a follow-up mental health visit if the first mental health diagnosis occurred in a nonmental health setting and the proportion of these who received the same mental health diagnosis as in the nonmental health setting.

†Based on *International Classification of Diseases, Ninth Revision, Clinical Modification* codes 290.0 to 319.0 that correspond to *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Revised (DSM-IV-R)* diagnostic codes for mental illness.

‡(1) "PTSD," 309.81; (2) "anxiety disorders," 300.00 to 300.09, 300.20 to 300.29, and 300.3; (3) "adjustment disorder," 309.0 to 309.9 (excluding 309.81); (4) "depressive disorders," 296.20 to 296.35, 296.50 to 296.55, 296.90, and 300.4; (5) "substance use disorders," 304 (drug dependence), 303 (alcohol dependence), and 305 (nondependent abuse of drugs and/or alcohol) (excludes codes for nicotine dependence).

§All MH diagnoses included in the *DSM-IV-R* other than the MH diagnoses listed in the double dagger footnote: "psychoses," 291 to 298 (11%); "schizophrenia," 295 (2%); "affective disorders," 924 (6%); "neurotic disorders," 300 (3%); "personality disorders," 301 (5%); "sexual disorders," 302 (7%); "depressive disorders not elsewhere classified," 311 (56%); and other mental health diagnoses (10%).

||Includes V-codes (see "Source of Data" subsection of the "Methods" section) indicating a psychosocial or behavioral problem: V15.40 to V15.49; V60.0 to V60.2; V60.4; V61.0 to V61.22; V61.80 to V61.83; V61.90; V62.0; V62.2; V62.5; V62.80 to V62.89; V63.0; V63.9; V65.2; V65.5; V69.2 to V69.8; V70.1 to V70.2; V71.0 to V71.01; V71.5; V71.81; and V79.0 to V79.1.

(RR, 5.04; 95% CI, 4.52-5.62) compared with active duty veterans 40 years or older. Stratified RR analyses revealed that this inverse trend between age and risk for mental health and PTSD diagnoses persisted when veterans of active duty service were further stratified by race and sex, with the highest risk occurring in the youngest white male active duty veterans followed by the youngest black active duty male veterans, compared with veterans of each group 40 years or older (**Table 4**).

#### COMMENT

Of 103 788 OEF/OIF veterans first seen at VA health care facilities following OEF/OIF service, a quarter received mental health diagnoses, and more than half of these veterans were dually or multiply diagnosed. The most common military service-related mental health diagnosis was PTSD. When psychosocial problems were considered, overall, nearly a third of OEF/OIF veterans were classified as having either mental health diagnoses and/or psychosocial problems. Of veterans receiving mental health diagnoses, the majority were diagnosed on or within days of their first VA clinic visit. Most initial mental health diagnoses occurred in nonmental health settings, particularly in primary care settings. These results indicate a large burden of co-occurring mental health disorders associated with service in Iraq and Afghanistan. This bur-

den will likely increase with time as new cases emerge and unresolved disorders become chronic, posing logistical and fiscal challenges for VA and non-VA mental health as well as primary care medical services.<sup>16-18</sup>

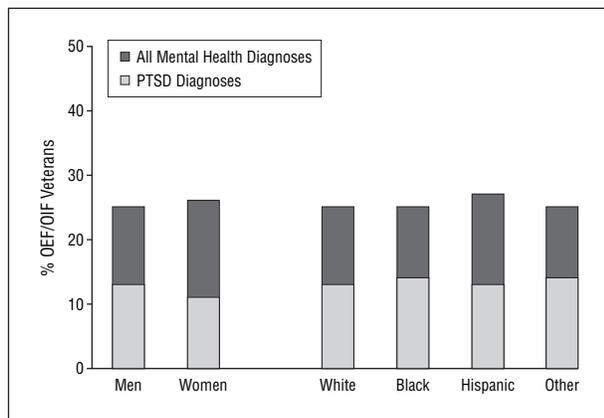
Roughly 29% of returned OEF/OIF veterans have already enrolled in VA health care, a historically high rate compared with 10% of Vietnam veterans.<sup>9,19</sup> Moreover, the median time from OEF or OIF service separation to the first VA clinic visit was short (<3 months) and from the first VA clinic visit to first mental health diagnosis even shorter (13 days). Of note, the majority of mental health diagnoses occurred in nonmental health settings, most commonly primary care settings. This relatively high rate of VA enrollment and the speed with which separated OEF/OIF veterans are seen and diagnosed provide the opportunity to implement early evidence-based interventions<sup>20</sup> in both mental health and primary care settings to decrease chronic military service-related mental illness and disability.

Central to effective early intervention, however, is early and accurate detection. Our results show that most initial mental health diagnoses among OEF/OIF veterans were made in nonmental health settings, particular in primary care. Of note, of the majority referred for mental health follow-up from a nonmental health setting, more than 90% received the same mental health diagnosis. The prevalence of mental health diagnoses among OEF/OIF

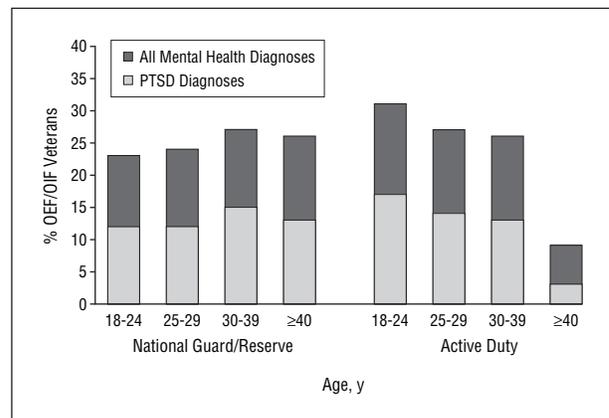
**Table 3. Prevalence and Relative Risk of Receiving 1 or More MH and PTSD Diagnoses**

Characteristic	≥1 MH Diagnoses, No. (%) of Veterans	RR (95% CI)	PTSD Diagnosis, No. (%) of Veterans	RR (95% CI)
<b>Sex</b>				
Female	3552 (26)	1 [Reference]	1550 (11)	1 [Reference]
Male	22 105(25)	0.94 (0.91-0.97)	11 654(13)	1.14 (1.08-1.10)
<b>Age, y</b>				
18-24	7558 (28)	1.47 (1.43-1.52)	4069 (15)	1.72 (1.63-1.80)
25-29	7525 (26)	1.37 (1.33-1.41)	3769 (13)	1.48 (1.41-1.56)
30-39	5827 (26)	1.39 (1.35-1.44)	3167 (14)	1.63 (1.55-1.72)
≥40	4748 (19)	1 [Reference]	2200 (9)	1 [Reference]
<b>Race</b>				
White	16 830(25)	1 [Reference]	8597 (13)	1 [Reference]
Black	4574 (25)	1.03 (1.00-1.06)	2504 (14)	1.10 (1.06-1.15)
Hispanic	3034 (27)	1.09 (1.05-1.12)	1465 (13)	1.03 (0.98-1.08)
Other	529 (25)	1.00 (0.93-1.08)	294 (14)	1.09 (0.98-1.22)
<b>Marital status</b>				
Never married	10 813(31)	1 [Reference]	5258 (15)	1 [Reference]
Married	9933 (31)	1.00 (0.98-1.02)	5537 (17)	1.14 (1.10-1.19)
Divorced	2572 (36)	1.18 (1.14-1.22)	1276 (18)	1.20 (1.14-1.27)
Separated or widowed	11 (44)	1.44 (1.26-1.65)	48 (18)	1.21 (0.93-1.56)
<b>Component</b>				
National Guard/Reserve	12298 (25)	1 [Reference]	6370 (13)	1 [Reference]
Active duty	13360 (25)	0.99 (0.97-1.01)	6835 (13)	0.98 (0.94-1.01)

Abbreviations: CI, confidence interval; MH, mental health; PTSD, posttraumatic stress disorder; RR, relative risk.



**Figure 1.** Posttraumatic stress disorder (PTSD) and mental health diagnoses by sex and race. OEF/OIF indicates Operations Enduring Freedom and Iraqi Freedom.



**Figure 2.** Posttraumatic stress disorder (PTSD) and mental health diagnoses by age group stratified by military component. OEF/OIF indicates Operations Enduring Freedom and Iraqi Freedom.

veterans reported herein is consistent with recent reports.<sup>3,6</sup> The frequency of ICD-9-CM PTSD diagnoses observed among OEF/OIF veterans in our study (13%) was only slightly lower than the current prevalence of PTSD several decades after returning from Vietnam as reported in the National Vietnam Veterans Readjustment Study (15.2%), but it was substantially higher than the 3.5% current prevalence reported in a recent national survey of a representative sample of the US population using standard assessments.<sup>21,22</sup>

We found minimal absolute differences between men and women, racial and ethnic subgroups, and component types regarding risk for receiving mental health and PTSD diagnoses. In contrast, similar to another recent study, we found both an absolute and statistically significant trend toward increased risk for mental health and

PTSD diagnoses with younger age, with the youngest group of OEF/OIF veterans (age, 18-24 years) at the highest risk compared with veterans 40 years or older.<sup>23</sup> This trend was magnified when the sample was first stratified by service component and further stratified by sex and race. Our analyses were limited by the fact that we lacked information on important potential confounders and/or effect modifiers of age such as military branch, rank, and combat exposure. Men serving in the active duty component are generally younger than members of the National Guard and Reserve. Because they are young, they are more likely to be of lower rank and more likely to have greater combat exposure than their older active duty counterparts. Degree of combat exposure has been associated with military service-related mental health disorders, particularly PTSD.<sup>3,6,16,18,19</sup> Our findings suggest

**Table 4. Relative Risk of Receiving 1 or More MH or PTSD Diagnoses Among White and Black Male Veterans of Active Duty Service by Age Group\***

Age, y	≥1 MH Diagnoses	PTSD Diagnosis
White active duty male veterans		
≥40	1 [Reference]	1 [Reference]
30-39	3.55 (3.20-3.94)	6.07 (5.05-7.28)
25-29	3.94 (3.59-4.33)	6.91 (5.82-8.21)
18-24	4.70 (4.28-5.16)	8.88 (7.49-10.54)
Black active duty male veterans		
≥40	1 [Reference]	1 [Reference]
30-39	1.90 (1.63-2.21)	2.17 (1.73-2.73)
25-29	2.07 (1.81-2.37)	2.47 (2.01-3.03)
18-24	2.18 (1.90-2.50)	2.64 (2.15-3.25)

Abbreviations: MH, mental health; PTSD, posttraumatic stress disorder; RR, relative risk.

\*Data are given as relative risk (95% confidence interval).

that enhanced prevention, detection, and treatment should be targeted at the youngest OEF/OIF veterans younger than 25 years, particularly those in the active duty components.

Our findings are not generalizable to all veterans of OEF/OIF service. We had no data on veterans who have not accessed VA care. Furthermore, because we lacked service separation dates on half of the veterans listed in the VA OEF/OIF Roster, we restricted our study population to veterans listed in the VA OEF/OIF Roster who were new users of VA health care after the invasion of Afghanistan and/or who had accessed VA services after their OEF/OIF service separation date (among those with a separation date). We excluded veterans who had VA contact prior to OEF/OIF because our aim was to describe mental health disorders associated with OEF/OIF military service, not with prior military conflicts. Consequently, our results may overestimate the burden of mental health disorders because veterans with mental health disorders may be more likely to seek treatment at a VA facility than those without<sup>19,24</sup> and because we excluded more National Guard and Reserve and older veterans with prior VA contact who had the same or fewer mental health diagnoses than active duty and younger veterans (Table 1). Nevertheless, our findings, based on more than 100 000 OEF/OIF veterans who are new users of VA health care following OEF/OIF military service, may inform targeted prevention and treatment efforts within or outside the VA system.

Another limitation is that OEF/OIF veterans were not assessed systematically with validated self-report measures or structured diagnostic interviews. We captured clinical mental health diagnoses based on ICD-9-CM codes in VA administrative databases.<sup>25</sup> Thus, our results are subject to misclassification. Nevertheless, ICD-9-CM diagnostic codes have been found to be a valid proxy for estimating disease.<sup>26,27</sup> Furthermore, our own findings of a greater than 90% diagnostic concordance among veterans first diagnosed in nonmental health settings subsequently diagnosed in mental

health settings, as well as the high proportion of veterans receiving the same mental health diagnosis on 2 or more clinical encounters, support our results based on the use of ICD-9-CM codes.

Our results signal a need for improvements in the primary prevention of military service-related mental health disorders, particularly among our youngest service members. Furthermore, early detection and evidence-based treatment in both VA and non-VA mental health and primary care settings is critical in the prevention of chronic mental illness, which threatens to bring the war back home as a costly personal and public health burden.

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# The Veterans Health Administration and Military Sexual Trauma

Rachel Kimerling, PhD, Kristian Gima, BA, Mark W. Smith, PhD, Amy Street, PhD, and Susan Frayne, MD, MPH

The persistence of sexual violence within the US armed forces is a fact long recognized by military officials, policymakers, health care professionals, and the media. The risk of exposure to sexual violence within the military is high. The annual incidence of experiencing sexual assault is 3% among active duty women and 1% among active duty men. Sexual coercion (e.g., quid pro quo promises of job benefits or threats of job loss) and unwanted sexual attention (e.g., touching, fondling, or threatening attempts to initiate a sexual relationship) occur at an annual rate of 8% and 27%, respectively, among women and 1% and 5% among men.<sup>1</sup> Research on deployment stress finds that such experiences constitute important duty-related hazards.<sup>2</sup>

The Veterans Health Administration (VHA) has adopted the term military sexual trauma (MST) to refer to severe or threatening forms of sexual harassment and sexual assault sustained in military service. In response to such widespread exposure in the military and the lasting deleterious consequences of sexual violence, the VHA has implemented a universal screening program for MST. For patients that screen positive, treatment for any MST-related injury, illness, or psychological condition is provided free of charge regardless of eligibility or co-pay status. These policies may represent the most comprehensive health policy response to sexual violence of any major US health care system. To our knowledge, we are the first to study the VHA's MST program, which provides an unparalleled opportunity to investigate the feasibility and clinical utility of screening for sexual violence and provides unique data to characterize the burden of illness associated with MST.

US epidemiological data indicate significant deleterious health and mental health correlates for sexual trauma. Among traumatic events, rape holds the highest conditional risk for posttraumatic stress disorder (PTSD); these data and data specific to military samples confirm that sexual trauma poses a risk for

**Objectives.** We examined the utility of the Veterans Health Administration (VHA) universal screening program for military sexual violence.

**Methods.** We analyzed VHA administrative data for 185 880 women and 4 139 888 men who were veteran outpatients and were treated in VHA health care settings nationwide during 2003.

**Results.** Screening was completed for 70% of patients. Positive screens were associated with greater odds of virtually all categories of mental health comorbidities, including posttraumatic stress disorder (adjusted odds ratio [AOR]=8.83; 99% confidence interval [CI]=8.34, 9.35 for women; AOR=3.00; 99% CI=2.89, 3.12 for men). Associations with medical comorbidities (e.g., chronic pulmonary disease, liver disease, and for women, weight conditions) were also observed. Significant gender differences emerged.

**Conclusions.** The VHA policies regarding military sexual trauma represent a uniquely comprehensive health care response to sexual trauma. Results attest to the feasibility of universal screening, which yields clinically significant information with particular relevance to mental health and behavioral health treatment. Women's health literature regarding sexual trauma will be particularly important to inform health care services for both male and female veterans. (*Am J Public Health*. 2007;97:2160–2166. doi:10.2105/AJPH.2006.092999)

developing PTSD as high as or higher than combat exposure.<sup>3–5</sup> In addition to PTSD, civilian and veteran women exposed to sexual assault or sexual harassment exhibit a range of other mental health and medical conditions.<sup>6–15</sup> These data have led to a greater awareness of sexual trauma issues among physicians and to the development of interventions and guidelines for the treatment and referral of sexual trauma in health care settings.<sup>16–18</sup>

These health sequelae may be magnified among veterans, because a number of issues uniquely associated with military settings may intensify the effect of this experience.<sup>19</sup> Perpetrators are typically other military personnel, and victims often must continue to live and work with their assailants daily, which increases the risk for distress and for subsequent victimization. Unit cohesion may create environments where victims are strongly encouraged to keep silent about their experiences, have their reports ignored, or are blamed by others for the sexual assault, all of which have been linked to poorer outcomes among civilian assault survivors.<sup>20</sup> Preliminary studies of MST among women veterans support

this hypothesis and have found increased self-reports of depression, substance abuse, and gynecological, urological, neurological, gastrointestinal, pulmonary, and cardiovascular conditions.<sup>6,10</sup>

The VHA was first authorized to provide outreach and counseling for sexual assault to women veterans after a series of hearings on veteran women's issues in 1992. Increased attention to these issues led Congress to extend services to male veterans shortly thereafter. In 1999, the VA's responsibility was extended from counseling to "all appropriate [MST-related] care and services" and universal screening was initiated. Most recently, Public Law 108-422, signed in 2004, made the VA's provision of sexual trauma services a permanent benefit. Screening programs and treatment benefits apply only to sexual trauma that occurred during military service. Each VA hospital now has a designated coordinator to oversee MST screening and treatment, and standardized training materials for MST screening are available to all VHA providers.<sup>21</sup>

Universal screening is accomplished through the use of a clinical reminder in the electronic

medical record. An alert remains visible to all clinicians until screen results are entered. Documentation of a positive screen enables the provider to code the visit as MST related so that care is delivered free of charge. The extent to which these resources have encouraged providers to screen for MST has not been evaluated. Most research from civilian sectors suggest that only a minority of patients are screened for violence by their health care providers.<sup>22</sup> However, VHA screening is integrated with standard clinical procedures, and training on the sensitive nature of MST screening is required at each VA hospital. Both of these factors are reliably associated with better screening compliance.<sup>22,23</sup>

The utility of screening policies to address this widespread veterans' health issue is complicated because MST is not a syndrome, diagnosis, or construct associated with clear treatment indications. This stands in contrast to most other health care screening targets, such as cervical cancer or depression. Contrary to the American Medical Association's recommendation for universal screening for violence against women,<sup>24,25</sup> the US Preventive Services Task Force concluded that the evidence does not currently support this approach, citing a lack of intervention research and insufficient evidence that screening ultimately improves health status.<sup>26</sup>

Rebuttals to the Task Force conclusions emphasize the necessity of a broader view: violence against women is a risk or maintaining factor for a variety of health conditions and therefore a key treatment consideration for these patients.<sup>27</sup> This perspective is especially relevant for addressing MST in the VHA health care system. Quantifying the types of health impairment associated with positive screens for MST is a first step toward evaluating the utility of universal screening. If screening detects clinically significant information, a positive screen would be an important factor in selecting appropriate treatment. Further evaluation of screening and treatment programs can then assess access to care according to the specific health outcomes found to be relevant to veteran men and women who have experienced sexual trauma.

MST has been primarily considered a women's issue. Men comprise the majority of the armed forces, however, and the incidence

of sexual harassment and assault reported by men during military service is significant. The approach to MST should therefore attend to both women and men and examine gender associated with MST as an initial step in the development of gender-specific interventions. Ours is the first examination of nationwide screening data for MST in the VHA and directly informs continued efforts to develop a gender-specific response to the health-related costs of military service and war. Specifically, we examined 3 issues: (1) whether universal screening detects a substantial population of VHA patients who report MST, (2) whether a greater burden of medical and mental illness is found among patients who screen positive for MST compared with patients who screen negative, and (3) whether the burden of illness associated with MST varies by patient gender.

## METHODS

We used VHA administrative data in a cross-sectional analysis of a national sample of VHA outpatients. We selected the sample using the VHA Outpatient Events File<sup>28</sup> to identify 4 139 888 veteran men and 185 880 veteran women who—during fiscal year 2003—had at least 1 outpatient visit to a VHA health care facility that reported valid MST monitoring data.

The VHA uses a clinical reminder in the patient's electronic medical record to screen for MST. The brief screening instrument contains the following items: "While you were in the military: (a) Did you receive uninvited and unwanted sexual attention, such as touching, cornering, pressure for sexual favors, or verbal remarks?; (b) Did someone ever use force or threat of force to have sexual contact with you against your will?" These items have been validated against clinical interview using psychometrically sound assessment instruments. Question "a" has a sensitivity of .92 and specificity of .89, and question "b" a sensitivity of .89 and a specificity of .90, which suggests that the screen is accurate.<sup>29</sup> The performance of this instrument is comparable to other widely used VA mental health screens for depression<sup>30</sup> and PTSD.<sup>31</sup>

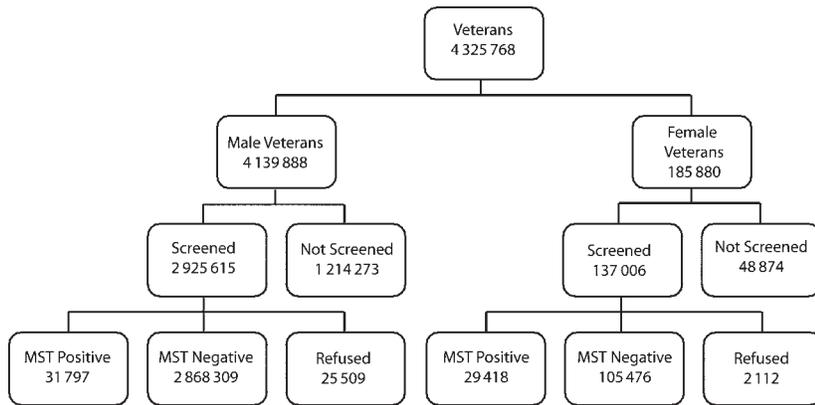
MST is treated as a duty-related hazard similar to combat exposure, so discrete events are grouped as a single construct in much the

same way that exposure to death and dying, being shot or hurt, severe supply shortage, and other experiences are grouped together under the rubric of combat exposure. This occupational exposure framework includes the context of the unwanted sexual activity as well as the events. The construct validity of this framework is supported by a recent analysis of the factors that make up the structure of deployment stress. The study found both sexual assault and sexual harassment loaded on a single sexual trauma or harassment factor that was distinct from the general harassment factor, as well as other deployment stressors such as combat.<sup>32</sup> The VHA codes patients as positive for MST if they respond affirmatively to either screening item.

Diagnosed physical health conditions were quantified by grouping diagnoses (according to the *International Classification of Diseases, Ninth Revision*<sup>33</sup>) into non-overlapping categories; we used an empirically validated comorbidity measure designed for use with large administrative data sets.<sup>34</sup> We quantified health conditions in a similar manner, using the Mental Health and Substance Abuse Clinical Classification Software,<sup>35</sup> which maps closely to the *Diagnostic and Statistical Manual for Mental Disorders, Fourth Edition*.<sup>36</sup>

All demographic variables were abstracted from VHA administrative records. VHA administrative data are known to have high proportions of individual records that are missing race values, although recorded values have a high rate of agreement with self-reports.<sup>37</sup> To assess the effect of missing race data on our results, we repeated all analyses for medical and mental health comorbidities excluding individuals who had missing race values. Results did not significantly differ from those we describe herein.

After determining the percentage of veteran women and men who were VHA patients screened for MST, we used the  $\chi^2$  test to compare categorical demographic variables by MST status, and logistic regression to model the odds of having a known medical or mental health condition as a function of MST status among men and women. We also calculated models while adjusting for the potentially confounding effects of age and race. Because our sample size was large, we calculated 99%



**FIGURE 1—Flowchart of the military sexual trauma (MST) screening process among Veterans Health Administration outpatients: 2003.**

married than were men who had negative screens. Men who reported MST were also more likely to have a service-connected disability.

**Mental Health Conditions**

The unadjusted and age- and race-adjusted odds ratios for the association of a positive MST screen with diagnosed mental health conditions appear in Table 2. MST was significantly associated with 2 to 3 times greater odds of a mental health diagnosis, and this association was stronger among women than among men. Almost all specific mental health comorbidities were more common among patients who screened positive for MST. Although the profiles of men and women who reported MST were similar, some gender differences did emerge. PTSD had the strongest

confidence intervals for all odds ratios to correct for the high likelihood of finding statistically significant results.

**RESULTS**

**Descriptive Statistics**

A total of 137 006 (73.7%) women and 2 925 615 (70.7%) men were screened for MST. Screened patients were slightly older, more likely to be White, and used more VHA care in the past year compared with patients who were not screened (median visits for women were 8 vs 3; median visits for men were 6 vs 4;  $P < .001$  for all comparisons).

We examined data for the 134 894 women and 2 900 106 men who were screened for MST, exclusive of patients who declined to answer when screened (1.5% of women and 0.9% of men; Figure 1). Table 1 describes the demographic characteristics of patients grouped by MST screening results. Women who had positive MST screens were younger, more likely to be White, and more likely to have never been married than were women who had negative screens. Women who reported MST were also more likely to have a service-connected disability (i.e., a disability caused by an injury or illness incurred in or aggravated by military service). Men who had positive MST screens were also younger, more likely to be White, and more likely to be separated, divorced, or never have been

**TABLE 1—Characteristics of Veterans Health Administration Outpatients, by Military Sexual Trauma (MST) Screen Results: October 1, 2002–September 30, 2003**

	Women		Men	
	Positive MST Screen, No. (%) <sup>a</sup>	Negative MST Screen, No. (%) <sup>a</sup>	Positive MST Screen, No. (%) <sup>a</sup>	Negative MST Screen, No. (%) <sup>a</sup>
Total no.	29 418	105 476	31 797	2 868 309
Age, y				
<25	630 (2.1)	3 034 (2.9)	108 (0.3)	8 332 (0.3)
25–34	4 291 (14.6)	14 375 (13.6)	894 (2.8)	57 294 (2.0)
35–44	9 354 (31.8)	22 163 (21.0)	3 361 (10.6)	146 876 (5.1)
45–54	10 775 (36.6)	25 792 (24.5)	9 496 (29.9)	483 379 (16.9)
55–64	2 877 (9.8)	12 183 (11.6)	7 630 (24.0)	639 034 (22.3)
≥65	896 (3.0)	9 337 (8.9)	5 484 (17.2)	783 948 (27.3)
Race/Ethnicity				
White	14 431 (49.1)	42 062 (39.9)	16 640 (52.3)	1 219 919 (42.5)
Black	4 684 (15.9)	14 040 (13.3)	3 333 (10.5)	239 564 (8.4)
Hispanic	652 (2.2)	1 559 (1.5)	874 (2.7)	55 957 (2.0)
Other	229 (0.8)	552 (0.5)	243 (0.8)	14 022 (0.5)
Unknown	9 422 (32.0)	47 263 (44.8)	10 707 (33.7)	1 338 847 (46.7)
Marital status				
Currently married	9 356 (31.8)	37 446 (35.5)	15 825 (49.8)	1 825 049 (63.6)
Separated/divorced/widowed	11 559 (39.3)	41 162 (39.0)	9 741 (30.6)	712 386 (24.8)
Never married	8 120 (27.6)	25 172 (23.9)	5 936 (18.7)	306 686 (10.7)
Unknown	383 (1.3)	1 696 (1.6)	295 (0.9)	24 188 (0.8)
Service-connected disability				
None	12 211 (41.5)	64 003 (60.7)	19 324 (60.8)	2 049 071 (71.4)
0–50%	9 412 (32.0)	28 896 (27.4)	6 735 (21.2)	531 471 (18.5)
51–100%	7 795 (26.5)	12 577 (11.9)	5 738 (18.0)	287 767 (10.0)

Note: Having experienced MST and not having experienced MST are significantly different at  $P < .001$  for women and men on all variables.

**TABLE 2—Age- and Race-Adjusted Odds of Mental Health Diagnoses as a Function of Screening Positive for Military Sexual Trauma (MST) Among Veterans Health Administration Outpatients: October 1, 2002–September 30, 2003**

	Women		Men	
	OR (99% CI)	AOR (99% CI)	OR (99% CI)	AOR (99% CI)
Any mental disorder	3.63 (3.50, 3.76)	2.91 (2.80, 3.02)	3.12 (3.03, 3.21)	2.44 (2.37, 2.52)
Adjustment disorders	1.69 (1.56, 1.83)	1.39 (1.28, 1.51)	2.41 (2.24, 2.59)	1.72 (1.60, 1.86)
Anxiety disorders	2.20 (2.10, 2.32)	1.84 (1.75, 1.93)	2.45 (2.34, 2.56)	1.95 (1.87, 2.04)
PTSD	11.82 (11.18, 12.50)	8.83 (8.34, 9.35)	4.12 (3.97, 4.27)	3.00 (2.89, 3.12)
Attention-deficit/conduct/ disruptive	2.63 (2.11, 3.28)	1.87 (1.49, 2.34)	4.07 (3.38, 4.89)	2.56 (2.13, 3.08)
Delirium/dementia/amnesic	0.61 (0.52, 0.71)	1.11 (0.94, 1.31)	1.04 (0.94, 1.14)	1.26 (1.15, 1.39)
Disorders of infancy or childhood	2.34 (1.25, 4.37)	2.20 (1.13, 4.27)	2.54 (1.58, 4.09)	1.95 (1.21, 3.15)
Impulse-control disorders	3.40 (2.39, 4.84)	...	3.23 (2.64, 3.95)	1.95 (1.59, 2.38)
Dissociative disorders	7.47 (5.29, 10.54)	4.97 (3.50, 7.07)	5.81 (3.81, 8.84)	3.61 (2.37, 5.51)
Eating disorders	4.13 (3.30, 5.15)	3.05 (2.43, 3.83)	4.06 (2.43, 6.81)	2.77 (1.65, 4.66)
Psychogenic disorders	2.41 (1.52, 3.81)	...	2.54 (1.56, 4.12)	1.96 (1.20, 3.19)
Sexual disorders and dysfunction	1.76 (1.34, 2.31)	1.37 (1.03, 1.81)	1.43 (1.33, 1.54)	1.30 (1.21, 1.40)
Sleep disorders	1.97 (1.54, 2.53)	1.66 (1.28, 2.16)	1.56 (1.24, 1.96)	1.27 (1.01, 1.61)
Somatoform disorder	2.48 (2.21, 2.77)	1.86 (1.66, 2.09)	2.80 (2.47, 3.18)	1.83 (1.61, 2.08)
Bipolar disorders	3.12 (2.92, 3.33)	2.25 (2.10, 2.41)	4.30 (4.06, 4.56)	2.72 (2.56, 2.89)
Depressive disorders	2.93 (2.83, 3.04)	2.33 (2.24, 2.42)	2.87 (2.78, 2.96)	2.21 (2.14, 2.29)
Personality disorders	4.60 (4.21, 5.01)	3.11 (2.84, 3.40)	5.77 (5.34, 6.24)	3.42 (3.16, 3.70)
Schizophrenia and psychoses	1.91 (1.77, 2.05)	1.65 (1.52, 1.78)	3.31 (3.15, 3.47)	2.41 (2.30, 2.54)
Alcohol disorders	3.28 (3.03, 3.55)	2.33 (2.15, 2.53)	2.67 (2.56, 2.79)	1.75 (1.67, 1.84)
Drug abuse	2.97 (2.73, 3.23)	2.12 (1.94, 2.31)	3.32 (3.16, 3.49)	2.09 (1.98, 2.20)
Suicide and intentional self-inflicted injury	2.96 (2.01, 4.37)	2.15 (1.45, 3.21)	5.34 (4.04, 7.05)	2.93 (2.22, 3.88)

Note. OR = odds ratio; CI = confidence interval; AOR = adjusted odds ratio; PTSD = posttraumatic stress disorder. An OR greater than 1 indicates that patients with MST were more likely to be diagnosed with that condition than were patients without MST. This difference is statistically significant at  $P < .01$  if the 99% CI does not include 1.

association with MST. The association of PTSD to MST was almost 3 times stronger among women than among men. The link between adjustment disorders and MST was significantly stronger among men than among women. Alcohol disorders and anxiety disorders were more common among both women and men who reported MST, but the relation to MST was significantly stronger among women than among men. The relation of MST to bipolar disorders and schizophrenia or psychoses was strong among men and women but significantly stronger among men. Our study found that several gender-linked mental health conditions typically reported in the literature as more common among

women—including dissociative, eating, and depressive disorders—showed similarly robust associations with MST among women and men.

### Medical Conditions

The unadjusted and age- and race-adjusted odds ratios for the association of a positive MST screen with medical diagnoses are presented in Table 3. Several medical conditions were significantly associated with MST, although the magnitude and consistency of effect was smaller than for mental health conditions. For both women and men, liver disease and chronic pulmonary disease showed moderate associations with MST, and the magnitude of these relationships did

not differ by gender. For women, obesity, weight loss, and hypothyroidism were significantly associated with MST. Among men, AIDS was significantly more common among men who reported MST.

### DISCUSSION

Our results suggest that universal screening for sexual trauma is feasible and yields valuable information to clinicians and administrators regarding health care for sexually traumatized women and men. The VHA universal screening program for MST screened over 70% of all patients, a rate commensurate with other screening-related performance measures collected by VHA in the same fiscal year: 80% for alcohol screening, 75% for tobacco counseling, and 90% for cervical cancer screening. Screening data indicate that MST is prevalent among veterans who seek VA health care, and as such, represents an important issue for VHA facilities. Approximately 22% of screened veteran women reported MST, which represents 29 418 patients. Sexual trauma, including MST, is often viewed as primarily a women's health issue and the proportion of positive screens among male patients is significantly lower than among women, only slightly over 1%. However, because the majority of VHA patients are men, this prevalence results in a detected clinical population of 31 797 patients, comparable in size to the MST population of female patients. Given the size of the clinical population of veterans reporting these experiences, it is clear that medical knowledge relevant to providing care for victims of sexual harassment and assault is an important issue within VHA, for male as well as female patients.

Positive screens for MST were associated most strongly with mental health conditions. MST was associated with more than double the likelihood of receiving a mental health diagnosis and was statistically linked to a range of mental health conditions. In general, the relation of MST to mental health comorbidities was significantly stronger among women than among men. Among women, MST was most strongly related to PTSD, dissociative disorders, eating disorders, and personality disorders, diagnoses that are reliably observed among trauma-exposed

**TABLE 3—Age- and Race-Adjusted Odds of Medical Diagnoses as a Function of Screening Positive for Military Sexual Trauma (MST) Among Veterans Health Administration Outpatients: October 1, 2002–September 30, 2003**

	Women		Men	
	OR (99% CI)	AOR (99% CI)	OR (99% CI)	AOR (99% CI)
Any medical disorders	0.86 (0.83, 0.89)	1.05 (1.02, 1.09)	0.84 (0.82, 0.87)	0.98 (0.95, 1.01)
Congestive heart failure	0.40 (0.32, 0.51)	0.88 (0.71, 1.10)	0.76 (0.70, 0.83)	0.95 (0.87, 1.03)
Valvular disease	0.70 (0.60, 0.83)	0.98 (0.83, 1.17)	0.71 (0.63, 0.81)	0.91 (0.80, 1.03)
Pulmonary circulation disease	0.62 (0.36, 1.05)	0.99 (0.56, 1.75)	1.05 (0.73, 1.50)	1.17 (0.82, 1.68)
Peripheral vascular disease	0.47 (0.38, 0.57)	0.99 (0.80, 1.23)	0.70 (0.65, 0.76)	0.89 (0.82, 0.97)
Hypertension	0.69 (0.66, 0.72)	0.97 (0.93, 1.02)	0.82 (0.79, 0.84)	0.93 (0.90, 0.96)
Paralysis	0.88 (0.67, 1.14)	0.83 (0.63, 1.10)	1.12 (0.95, 1.32)	1.01 (0.85, 1.19)
Other neurological disorders	0.97 (0.86, 1.09)	0.96 (0.85, 1.09)	1.03 (0.94, 1.13)	1.06 (0.96, 1.16)
Chronic pulmonary disease	1.20 (1.13, 1.27)	1.27 (1.19, 1.35)	1.08 (1.03, 1.13)	1.16 (1.11, 1.22)
Diabetes without chronic complications	0.83 (0.77, 0.89)	1.06 (0.98, 1.14)	0.91 (0.87, 0.95)	0.98 (0.94, 1.03)
Diabetes with chronic complications	0.80 (0.68, 0.94)	1.07 (0.90, 1.28)	1.06 (0.98, 1.15)	1.08 (1.00, 1.17)
Hypothyroidism	0.82 (0.77, 0.88)	1.11 (1.04, 1.19)	0.90 (0.83, 0.97)	1.08 (1.00, 1.17)
Renal failure	0.48 (0.36, 0.64)	0.72 (0.54, 0.98)	0.73 (0.65, 0.82)	0.87 (0.77, 0.97)
Liver disease	1.66 (1.35, 2.03)	1.30 (1.05, 1.60)	1.90 (1.71, 2.11)	1.26 (1.13, 1.40)
Peptic ulcer disease and bleeding	0.67 (0.21, 2.12)	...	1.07 (0.61, 1.88)	1.12 (0.63, 1.97)
AIDS	1.38 (0.88, 2.17)	...	6.05 (5.24, 6.97)	3.68 (3.19, 4.26)
Lymphoma	0.54 (0.32, 0.90)	0.71 (0.42, 1.21)	0.83 (0.62, 1.11)	0.92 (0.69, 1.24)
Metastatic cancer	0.47 (0.27, 0.87)	0.65 (0.36, 1.15)	0.94 (0.70, 1.27)	1.08 (0.80, 1.46)
Solid tumor without metastasis	0.67 (0.59, 0.76)	0.97 (0.85, 1.11)	0.72 (0.67, 0.78)	0.99 (0.92, 1.06)
Rheumatoid arthritis/collagen vascular disease	0.87 (0.76, 1.00)	0.96 (0.83, 1.10)	0.93 (0.79, 1.08)	0.99 (0.85, 1.16)
Coagulopathy	0.79 (0.59, 1.05)	1.00 (0.74, 1.35)	0.81 (0.68, 0.97)	0.88 (0.74, 1.05)
Obesity	1.29 (1.23, 1.36)	1.13 (1.07, 1.19)	1.13 (1.08, 1.19)	1.00 (0.95, 1.05)
Weight loss	0.94 (0.76, 1.16)	1.29 (1.03, 1.61)	1.06 (0.90, 1.24)	1.11 (0.95, 1.30)
Fluid and electrolyte disorders	0.96 (0.82, 1.13)	1.07 (0.90, 1.28)	1.11 (0.97, 1.26)	1.14 (1.00, 1.29)
Chronic blood loss anemia	1.20 (0.62, 2.29)	...	0.94 (0.40, 2.24)	1.08 (0.46, 2.57)
Iron deficiency anemia	0.86(0.78, 0.94)	0.91 (0.83, 0.99)	0.84 (0.77, 0.90)	0.99 (0.92, 1.08)

Note. OR = odds ratio; CI = confidence interval; AOR = adjusted odds ratio; PTSD = posttraumatic stress disorder. An OR greater than 1 indicates that patients with MST were more likely to be diagnosed with that condition than were patients without MST. This difference is statistically significant at  $P < .01$  if the 99% CI does not include 1.

individuals.<sup>34,38</sup> Dissociative disorders and personality disorders were also among the conditions with the strongest link to MST for men. The link between MST and suicide and intentional self-harm (over twice as common among women and men who report MST) suggests the need for heightened awareness of and screening for suicide risk in this population.

Conditions such as dissociation, personality disorders, and self-harm comprise a constellation of symptoms associated with childhood

trauma or other chronic, prolonged exposure to trauma.<sup>39–41</sup> The robust association of these disorders with MST could suggest that the possibly prolonged nature of the exposure in the military social context may affect individuals in a manner similar to family violence. Exposure to early trauma, frequent among veterans,<sup>42</sup> may also predispose patients to both revictimization by way of MST<sup>43</sup> and greater risk for these mental health problems following revictimization.<sup>44</sup> Extant research with women suggests MST

frequently co-occurs with childhood or civilian sexual assault, but these events do not account for observed relations between MST and persistent traumatic stress. For example, approximately 30.3% of women sexually assaulted in the military also report sexual assault while a civilian, and 16.8% report childhood sexual abuse.<sup>43</sup> The diagnosis of PTSD, however, is more common among women veterans with a military sexual trauma than among those who report other traumatic events or other sexual assaults. Furthermore, the effects of previous trauma or civilian sexual assault do not account for the strong relation observed between MST and PTSD.<sup>43,45</sup> Additional research on the characteristics of MST exposures and their context in lifetime trauma, especially those that include samples of men, will help further clarify these issues.

VHA facilities are mandated to provide benefits for all aspects of MST-related care. Our data suggest that most of these services will be specialty mental health services. Mental health providers should be familiar with the clinical issues related to MST for both men and women.<sup>21</sup> Given the strong associations between positive MST screens and trauma-related disorders (e.g., PTSD adjusted odds ratio [AOR]=8.83 for women; AOR=3.00 for men), treatment of PTSD secondary to sexual trauma will be especially important. For these and other conditions associated with MST, positive screens could increase access to care. The implementation of an MST treatment benefit would enable providers to offer tailored interventions that integrate MST into case conceptualizations and treatment plans. Evaluations of the clinical effect of universal screening should include measurement of the access to and benefit from mental health services for a variety of related conditions.

Behavioral factors can play an important role in the pathogenesis of most of the medical disorders that emerged as related to MST (e.g., liver disease, chronic lung disease, weight-related disorders, and HIV), further emphasizing the potential benefits of mental health services for MST-exposed veterans. Health behaviors that increase risks for these conditions, such as smoking, alcohol use, drug use, risky sexual behaviors, and unhealthy eating patterns, are more common among

trauma-exposed patients than among nonexposed patients.<sup>46,47</sup> Regardless of the path to the association, the demonstrated link between a positive screen for MST and a subset of the medical conditions provides further evidence of the extensive public health burden associated with sexual trauma in the military. Our findings highlight the importance of screening for a history of interpersonal violence, including MST, in behavioral health counseling and health care delivery.

### Limitations

The data from our study should be interpreted with some caution. They are cross-sectional, and although we know that exposure to MST occurred during military service before VA health care, the temporal order of MST and the onset of potentially chronic comorbidities cannot be precisely discerned. These results only indicate that specific types of conditions are significantly overrepresented among women and men who report MST, and the results are clinically useful in caring for patients who experienced sexual trauma in the military. Comparison of screen results with the high rates of severe harassment and sexual assault documented among the armed forces<sup>1</sup> and prevalence rates from other studies of MST<sup>10,14</sup> suggests that the VHA's current MST screening may underdetect such experiences. Therefore, these data may represent conservative estimates of the true prevalence of MST among veteran VHA patients. Inclusion of some patients with undetected MST in our "no MST" group would tend to dilute the strength of our findings. If so, the relation of MST to medical and mental health conditions may be more robust than observed in these data. As research into the VHA's MST screening program continues and VHA becomes more expert at screening for these sensitive issues it will be possible to obtain more accurate prevalence estimates of MST and associated clinical conditions among the women and men in VA health care.

### Conclusions

Our study results are a first step in elucidating the significant burden of illness associated with MST. They can inform implementation of MST treatment benefits by the VHA and are relevant to VHA health care practice and policy.

Sexually victimized patients are often reluctant to disclose to providers unless asked,<sup>48</sup> and these data indicate that a relatively simple and time-efficient intervention can facilitate disclosure of this clinically relevant information. Mental health program planning can address the specific needs of MST-exposed patients and tailor programs to patient gender. Behavioral health interventions may be especially relevant to the medical needs of MST patients and may help reduce excess morbidity. The VHA is caring for increasing numbers of younger veterans, veteran women, and combat-exposed veterans as postdeployment troops return from Iraq and Afghanistan. These changing demographics suggest that MST will continue to be an important issue for VHA facilities and that universal screening programs are likely to continue to detect important clinical needs among the large population of MST-exposed patients.

The VHA response to MST is necessarily focused on screening, detection, and secondary prevention, because primary prevention of MST is outside the domain of VA health care. Growing awareness and knowledge of MST, coupled with reports about continued instances of MST in current military conflicts, has led to augmentation of primary prevention efforts within the military, so that the issue is not chiefly addressed within VHA treatment programs. In 2004, the Department of Defense launched the Sexual Assault Prevention and Response Office, a single point of accountability on sexual assault policy for the military. Similar coordinated prevention efforts by the military—to target the severe forms of sexual harassment included in the definition of MST—would help to address this important public health issue.

The VHA's universal screening program and mandated MST-related treatment benefit represent unprecedented policies toward ameliorating the significant public health burden associated with experiences of sexual harassment and assault during military service. Even as military prevention programs continue to develop, our data indicate that the population of sexually traumatized men and women under the care of the VHA is alarmingly large and suffers from substantial morbidity. Continued outreach and education programs can help veterans understand the widespread nature of this problem and the resources available

through VA. Education about MST is also relevant for providers in the private sector who may provide care to the growing numbers of returning veterans, most of whom do not use VA health care. The Department of Defense and the private sector must monitor education, outreach, and treatment programs of the VHA to gauge the success of efforts to prevent MST. Ongoing attention by scientists, policymakers, and VHA and military leaders is required to address this important public health issue. ■

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### Contributors

R. Kimerling conceptualized the study and wrote the article. K. Gima performed the data analysis. All authors collaborated on study conceptualization, interpreted the findings, and reviewed and edited drafts of the article.

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This study was approved by the institutional review board of the Administrative Panel on Human Subjects in Medical Research, Stanford University.

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# Long-Term Effects of Military Service on Mental Health among Veterans of the Vietnam War Era

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**ABSTRACT** Comparing outcomes of veterans who served in Vietnam and those who served elsewhere, we examined treatment of post-traumatic stress disorder, treatment of other mental health conditions, psychiatric treatment location, and six mental health well-being measures. The analytic sample consisted of nationally representative data from the 2001 National Survey of Veterans. Analyses included multivariate logistic regression that controlled for sociodemographic characteristics. Of Vietnam War-era veterans in the National Survey of Veterans ( $N = 7,914$ ), 3,937 served in Vietnam and 3,977 served elsewhere. These veterans were stratified into  $<60$  years of age ( $N = 6,141$ ) and  $\geq 60$  years of age ( $N = 1,766$ ). Veterans who served in Vietnam had notably poorer mental health than did those who served elsewhere. There were striking mental health differences between younger and older veterans; younger veterans had substantially worse measures of mental health. These results suggest greater resource needs among younger Vietnam War veterans. Clinicians and the Department of Veterans Affairs should focus on mental health services for younger veterans.

## INTRODUCTION

Nearly 32% of all living veterans, that is, 8.4 million, served during the Vietnam War era, making this the largest cohort of veterans in the United States.<sup>1,2</sup> Many veterans who returned from Vietnam described having somatic illnesses, such as chronic fatigue, insomnia, headaches, dizziness, shortness of breath, and joint pain, without evidence of physical injury, and were eventually identified as suffering from post-traumatic stress disorder (PTSD).<sup>3,4</sup> Furthermore, many of those veterans suffered long-term mental health consequences; in most instances, those problems were not identified during combat operations but presented many years later.<sup>5</sup> Extensive research demonstrated that Vietnam War-era veterans experienced PTSD at rates far higher than those for other noncombat veteran cohorts or the civilian population, with chronic PTSD rates remaining unusually high 20 years after exposure.<sup>6-10</sup>

The National Vietnam Veterans Readjustment Study, conducted in the middle 1980s, suggested that 30.9% of veterans who served in Vietnam experienced PTSD at some time after their service, with a prevalence of 15.2% at the time of the study.<sup>9-12</sup> A reanalysis of the National Vietnam Veterans Readjustment Study data using new diagnostic criteria found that 18.7% of veterans who served in Vietnam had PTSD at some time, with a current prevalence of 9.1%.<sup>8,13,14</sup> Also in the middle 1980s, using data from the Centers for Disease Control and Prevention Vietnam Experience Study,<sup>7</sup> researchers studied PTSD in a sample from lower ranks of

enlisted Vietnam veterans and found that 14.7% experienced PTSD at some time, with a current prevalence of 2.2%. Compared with those who served elsewhere, veterans who served in Vietnam also had higher prevalences of depression (4.5% vs. 2.3%) and anxiety (4.9% vs. 3.2%).<sup>6,7</sup> Some authors criticized those two studies for overestimating PTSD prevalence, because the high-end estimate of those with PTSD exceeded the number who served in direct combat.<sup>5,15,16</sup> However, these results may suggest that personnel in support units also had higher PTSD risk, a phenomenon that generally did not occur after previous conflicts.<sup>5,15-17</sup>

Using data from the National Survey of Veterans (NSV), a nationally representative survey of noninstitutionalized U.S. Vietnam War-era veterans conducted in 2001 (28 years after the end of the Vietnam War and 15 years after the National Vietnam Veterans Readjustment Study and the Vietnam Experience Study), we compared a number of mental health outcomes among Vietnam War-era veterans who served in Vietnam and those who served elsewhere. To our knowledge, ours is the first study to use the 2001 NSV to examine mental health outcomes of Vietnam War-era veterans and the first to examine the six measures of mental health well-being for this cohort. The timing of the 2001 NSV allowed us to examine mental health outcomes among veterans who had reached middle age and among those  $\geq 65$  years of age. Expanding on previous studies of the long-term mental health effects of military service in the Vietnam War-era, many of which were limited by their exclusive focus on PTSD, our aims were to examine (1) the diagnosis and treatment of PTSD, (2) treatment for other mental health conditions, (3) Veterans Administration (VA) psychiatric treatment, (4) other psychiatric treatment, and (5) six measures of mental health well-being. The approach used allowed us to examine long-term mental health effects of military service during the Vietnam War era and to compare each mental health outcome for veterans who served in Vietnam and veterans who served elsewhere. On

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the basis of previous studies, we hypothesized that, among a cohort of Vietnam War-era veterans, those who served in Vietnam would be more likely to report treatment for PTSD, other mental health conditions, use of mental health services, and poorer general mental health well-being than those who served elsewhere. One previous study of veterans found striking mental health differences between younger and older veterans, with substantially worse mental health among younger veterans.<sup>18</sup> This study provides evidence that younger and older veterans may be affected differently by their Vietnam War-era experiences. In the case of the Vietnam War, there may be both age differences and differences attributable to the fact that older veterans were in Vietnam earlier in the war, when public opinion was more favorable. Therefore, we also hypothesized that younger veterans would report poorer mental health than older veterans.

## METHODS

### Study Sample

Data were from the 2001 NSV, which was conducted by the VA.<sup>19</sup> The survey was nationally representative of noninstitutionalized veterans living in the continental United States. The analytic sample identified veterans in any service during the Vietnam War (August 1964 to March 1973). The sample included 3,937 veterans who served in Vietnam and 3,833 who served elsewhere. Service in Vietnam was used in lieu of actual combat experience because those in Vietnam who were not in combat often experienced combat-related trauma.<sup>5,12,13,20,21</sup> Furthermore, there is evidence of notable reporting error when individuals are interviewed about combat experiences.<sup>22</sup> To investigate age differences in mental health, the sample was stratified into two age categories, namely, veterans <60 years of age at the time of the survey ( $N = 1,776$ ) and those  $\geq 60$  years of age ( $N = 6,141$ ). Among those in the <60-year age group who did not serve in Vietnam, 19% served in Germany, 35% served in Asia, and 38% served in the United States; among those  $\geq 60$  years of age, 17% served in Germany, 54% served in Asia, and 25% served in the United States.

### Dependent Variables: Measures of Mental Health Well-Being

Receipt of treatment for PTSD was a dummy variable indicating veterans who reported receiving treatment for this condition in the 12 months preceding the survey. Other dummy variables indicated whether the veteran reported having received treatment for "any other mental health condition" in the 12 months preceding the survey and whether treatment for PTSD or other mental health conditions was at a VA facility or elsewhere. Six additional mental health well-being measures were analyzed, based on six questions that elicited information about general emotional well-being, as follows. (1) During the past 4 weeks, have you accomplished less than you would like as a result of any emotional problems, such as feeling depressed or anxious? (2) During

the past 4 weeks, did you not do work or other regular daily activities as carefully as usual as a result of any emotional problems, such as feeling depressed or anxious? (3) During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities, like visiting friends or relatives? (4) How much of the time during the past 4 weeks did you have a lot of energy? (5) How much of the time during the past 4 weeks have you felt calm and peaceful? (6) How much of the time in the past 4 weeks have you felt downhearted or blue? Available responses for questions 1 through 3 were "yes, all of the time," "yes, most of the time," "yes, some of the time," "yes, a little of the time," or "no, none of the time." Available responses for questions 4 through 6 were "all of the time," "most of the time," "a good bit of the time," "some of the time," "a little of the time," or "none of the time." After reviewing frequencies of responses, we created a dichotomous variable for each response. For responses for questions 1 through 3, the variable indicated whether the response was among the first three of the available responses (coded 1) or the last two (coded 0). For responses for questions 4 through 6, the variable indicated whether the response was among the first four of the available responses (coded 1) or the last two (coded 0). We acknowledge that questions 3 and 4 capture information about physical health as well as mental health.

### Exposure Variable

The dummy-coded exposure variable identified whether each veteran served in Vietnam (coded 1) or elsewhere (coded 0).

### Independent Variables

A number of independent variables were included in the models to control for potential confounding. Among these variables were the respondent's gender and age (in years) and whether the veteran had dependents. Education was categorized by using separate dummy variables, indicating high school education or less, some college or vocational training, or a master's or professional degree. Separate dummy variables indicated respondents who identified themselves as African American, Hispanic, American Indian, Asian/Native Hawaiian/Pacific Islander, or non-Hispanic Caucasian. Another dummy variable indicated the small number of respondents who reported no race/ethnicity or two or more. Marital status was coded as married or not married; the latter category included veterans who were divorced, widowed, or separated. A separate dummy variable indicated veterans who had never married. On the basis of a review of the distribution of income among respondents, separate dummy variables indicated those earning \$0 to \$24,999, \$25,000 to \$49,999, \$50,000 to \$74,999, and more than \$75,000. We created a dummy variable for veterans with missing income information. Dummy variables for occupational status were created to indicate veterans who worked full-time, worked part-time, or were not working. Additional dummy variables indicated having a service-connected disability, self-reports of having ever been exposed to environ-

mental hazards in the military, and having health insurance. The dummy variable indicating insurance was coded 1 for veterans who were covered under Medicare, Medicaid, TRICARE (health care insurance for active and retired military personnel), and/or private insurance and 0 for all others. Several physical health status controls were included. Self-reported health was coded as a dummy variable, with 1 indicating those who reported good, very good, or excellent health and 0 fair or poor health. A separate dummy variable indicated those impaired in three or more activities of daily living.

### Statistical Analyses

To compare characteristics of those who served in Vietnam and those who served elsewhere, the  $\chi^2$  statistic was used for categorical variables and the *t* test for continuous variables.

All analyses were weighted to be nationally representative of noninstitutionalized U.S. Vietnam War-era veterans. For each dependent variable, we first estimated the unadjusted association with Vietnam service. We then estimated separate logistic regression models, controlling for all of the covariates. Variance tolerance tests showed that multicollinearity was not a challenge to the analysis. The analyses were conducted by using statistical analysis software (SAS 9.1; SAS Institute, Cary, North Carolina).

## RESULTS

### Sociodemographic Characteristics

Respondent characteristics are reported in Table I for those who served in Vietnam and those who served elsewhere,

**TABLE I.** Bivariate Comparisons of Vietnam War-Era Veterans Who Served in Vietnam and Veterans Who Served Elsewhere, <60 and  $\geq 60$  Years of Age

Veteran Characteristics	Age <60			Age $\geq 60$		
	Served in Vietnam (N = 2,961)	Served Elsewhere (N = 3,180)	<i>p</i> Value	Served in Vietnam (N = 962)	Served Elsewhere (N = 804)	<i>p</i> Value
Age, mean $\pm$ SD (years)	53.97 $\pm$ 2.74	52.16 $\pm$ 4.04	<0.0001	66.99 $\pm$ 5.57	67.10 $\pm$ 6.83	<0.0001
Gender, male/female, <i>n</i>	2,944/17	2,970/210	<0.0001	952/10	783/21	0.0122
Educational attainment, <i>n</i> (%)						
High school or less	1,124 (36.04)	1,027 (33.08)	<0.0001	272 (31.02)	280 (36.50)	0.0031
Bachelor's degree or vocational training after high school	1,551 (54.85)	1,783 (56.87)	0.0037	521 (51.33)	401 (48.25)	0.0728
Master's or professional degree	286 (9.10)	370 (10.05)	0.0122	169 (17.65)	123 (15.25)	0.2012
Family relationships, <i>n</i> (%)						
Married	2,222 (77.65)	2,418 (77.41)	0.3644	841 (87.87)	679 (85.77)	0.0727
Divorced/widowed/separated	583 (17.91)	550 (17.23)	0.0157	95 (9.16)	90 (9.42)	0.3675
Never married	156 (4.44)	212 (5.36)	0.0211	26 (2.97)	35 (4.81)	0.0586
Racial background/ethnicity, <i>n</i> (%)						
Caucasian	2,476 (86.17)	2,663 (86.23)	0.8974	815 (87.14)	707 (88.60)	0.0511
African American	307 (8.62)	338 (9.60)	0.7391	100 (9.17)	67 (8.24)	0.1403
Alaskan/American Indian	185 (3.42)	152 (2.85)	0.0116	46 (2.91)	30 (2.01)	0.2787
Asian/Hawaiian/Pacific Islander	32 (0.94)	35 (0.71)	0.9402	18 (1.72)	6 (0.55)	0.0420
Two or more races/other	23 (0.54)	22 (0.44)	0.6966	10 (0.52)	3 (0.29)	0.1028
No race data provided	23 (0.88)	31 (0.64)	0.4061	8 (0.84)	11 (1.59)	0.2764
Hispanic ethnicity	97 (3.34)	86 (2.86)	0.1881	17 (1.35)	13 (1.15)	0.8078
Occupational status, <i>n</i> (%)						
Income of \$0–24,999	511 (12.36)	484 (12.35)	0.0304	123 (11.29)	105 (10.79)	0.8643
Income of \$25,000–49,000	735 (21.91)	693 (20.88)	0.0050	276 (27.05)	225 (26.46)	0.7934
Income of \$50,000–74,999	601 (23.89)	682 (23.67)	0.2683	179 (18.62)	148 (20.68)	0.9146
Income of more than \$75,000	594 (24.01)	733 (25.41)	0.0045	145 (18.80)	118 (17.44)	0.8159
Income data missing	520 (17.85)	588 (17.69)	0.3442	239 (24.24)	208 (25.64)	0.6212
Working full-time	1,703 (66.94)	1,994 (68.45)	<0.0001	238 (30.21)	258 (41.74)	0.0006
Working part-time	550 (17.94)	612 (19.25)	0.5027	158 (16.66)	119 (16.47)	0.3503
Not working	708 (15.12)	574 (12.30)	<0.0001	566 (53.13)	427 (41.79)	0.0157
Physical health status, <i>n</i> (%)						
Self-perceived health good/very good/excellent	1,762 (71.76)	2,328 (81.03)	<0.0001	581 (66.99)	530 (74.39)	0.0167
Three or more disabilities in ADLs	518 (11.05)	435 (8.60)	<0.0001	161 (10.77)	97 (6.84)	0.0056
Service-connected disability	1,253 (21.55)	976 (12.64)	<0.0001	608 (37.61)	342 (17.61)	<0.0001
Environmental hazards, <i>n</i> (%)						
Exposed	1,804 (49.49)	576 (15.21)	<0.0001	561 (50.41)	150 (14.65)	<0.0001
Not exposed	691 (31.76)	2,347 (77.53)	<0.0001	268 (35.31)	601 (79.03)	<0.0001
Do not know	466 (18.74)	257 (7.26)	<0.0001	133 (14.28)	53 (6.32)	<0.0001
Has medical insurance, <i>n</i> (%)	2,320 (82.29)	2,652 (85.49)	<0.0001	914 (95.40)	739 (92.42)	0.0081

Data were from the 2001 NSV.<sup>19</sup> All percentages are weighted for national representativeness. ADL, activity of daily living.

dichotomized for those  $\geq 60$  years of age and those  $< 60$  years of age at the time of the survey. For veterans in both age categories, unweighted results are shown, with weighted percentages in parentheses. We focus on results for characteristics that were substantially and statistically significant. Among veterans  $< 60$  years of age, those who served in Vietnam were more likely to report poorer health, impairments in activities of daily living, and a service-connected disability (all  $p < 0.0001$ ). They were also more likely to report having been exposed to environmental hazards ( $p < 0.0001$ ). Among veterans  $\geq 60$  years of age, those who served in Vietnam were more likely to report poorer health, impairments in activities of daily living, and a service-connected disability (all  $p < 0.05$ ). They were also more likely to report having been exposed to environmental hazards ( $p < 0.0001$ ).

### Adjusted Mental Health Outcomes

Table II shows adjusted odds ratios (ORs) and 95% confidence intervals (CIs) associated with the exposure variable for each dependent variable, for veterans  $< 60$  years of age and those  $\geq 60$  years of age. Covariates representing almost all of the control variables (not shown in Table II) were statistically significant in all of the models, for both age groups. Among veterans  $< 60$  years of age, those who served in Vietnam had  $> 3$  times the adjusted odds of receiving treatment for PTSD, compared with those who served elsewhere (OR, 3.18; 95% CI, 3.16–3.21). Veterans who served in Vietnam were notably more likely to be treated for other mental health conditions (OR, 1.09;  $p < 0.001$ ) and to have

psychiatric treatment at VA facilities (OR, 1.42) or elsewhere (OR, 1.17; both  $p < 0.05$ ). In results for the six general measures of mental health well-being, veterans who served in Vietnam had 51% higher odds of reporting emotional problems that limited their accomplishments (OR, 1.51; 95% CI, 1.50–1.52), 40% higher odds of taking less care in daily activities because of emotional problems (OR, 1.40; 95% CI, 1.39–1.41), higher odds of reporting that their physical or emotional health interfered with social activities (OR, 1.11; 95% CI, 1.10–1.12), and higher odds of feeling downhearted or blue (OR, 1.28; 95% CI, 1.27–1.28). They had lower odds of feeling calm and peaceful (OR, 0.78; 95% CI, 0.77–0.78) and having lots of energy (OR, 0.86; 95% CI, 0.86–0.86). Consistent with the results for the unadjusted analyses, among veterans  $\geq 60$  years of age, those who served in Vietnam had poorer mental health in most instances; however, the differences were much smaller than those for the younger veterans.

### DISCUSSION

Using national data representing Vietnam War-era veterans 28 years after the end of the Vietnam War, our study is the first to use the 2001 NSV to examine differences in mental health measures between veterans who served in Vietnam and those who served elsewhere. Consistent with our first hypothesis, mental health status was notably poorer among those who served in Vietnam than among those who served elsewhere. These findings are consistent with previous findings of high PTSD prevalence in this cohort of veterans.<sup>5–14,17,23</sup> Consistent with our second expectation, the mental health disparity affecting those who served in Vietnam was greater among younger veterans than among those  $\geq 60$  years of age. For example, among veterans  $< 60$  years of age, the adjusted odds of being treated for PTSD were 3 times higher among veterans who served in Vietnam, compared with those who served elsewhere, whereas, among veterans  $\geq 60$  years of age, those who served in Vietnam had  $\sim 14\%$  greater odds of such treatment. These results are consistent with a previous study of health-related quality of life.<sup>18</sup> We also found evidence that veterans who served in Vietnam were more likely to use psychiatric and mental health services from the VA than were those who served elsewhere, consistent with previous research.<sup>24,25</sup> Furthermore, there was substantial evidence that veterans who served in Vietnam experienced significantly more problems with many general measures of mental health well-being. Collectively, our results indicate substantially poorer mental health status among those who served in Vietnam and greater need for mental health services, particularly among veterans  $< 60$  years of age.

Several considerations should be weighed when these results are evaluated. As in many previous studies, the data were based on retrospective self-reports.<sup>8,11–13</sup> The data did not allow us to control for premilitary risk factors for mental health well-being. However, we assume that, because all respondents served in the military, most were in reasonably good health at the beginning of their service. This assumption

**TABLE II.** Adjusted Results of Logistic Regression Predicting Mental Health Outcomes for Veterans Who Served in Vietnam, Compared with Veterans Who Served Elsewhere, According to Age Group

	OR (95% CI)	
	Age $< 60$	Age $\geq 60$
Outcome variables		
PTSD	3.18 (3.16–3.21)	1.14 (1.11–1.17)
Other mental health condition	1.09 (1.08–1.09)	0.75 (0.74–0.77)
Treatment locations		
VA psychiatric treatment	1.41 (1.41–1.43)	1.31 (1.28–1.35)
Other psychiatric treatment	1.17 (1.16–1.17)	0.89 (0.87–0.91)
Mental health measures		
Emotional problems limited accomplishments	1.51 (1.50–1.52)	1.03 (1.02–1.04)
Took less care in daily activities because of emotional problems	1.40 (1.39–1.41)	0.82 (0.80–0.83)
Health interfered with social activities	1.11 (1.10–1.12)	1.33 (1.31–1.35)
Feel calm and peaceful	0.78 (0.77–0.78)	1.33 (1.32–1.34)
Have lots of energy	0.86 (0.86–0.86)	1.25 (1.23–1.25)
Feel downhearted or blue	1.28 (1.27–1.28)	0.86 (0.85–0.88)

Data were from the 2001 NSV.<sup>19</sup> Results were adjusted for age, gender, race, ethnicity, education level, service-connected disability status, employment status, income level, marital status, insurance status, self-rated health, impairment in activities of daily living, and environmental exposures.

is reasonable, because induction standards in the military are consistent, which allows controlling for any "healthy worker" effect. Recruits are extensively screened, not only for physical abilities but also for mental and emotional well-being. The presence of any current mental or emotional issues, or a history of such issues, is disqualifying. The disqualifying list is extensive, including mood disorders, depression, eating disorders, personality disorders, suicidal ideations, and anxiety disorders, as well as any evidence of alcohol or drug dependence.<sup>26-28</sup> Similar exclusion criteria applied to both enlisted personnel and draftees throughout the Vietnam War.<sup>29,30</sup>

Selective death and attrition of the sickest subjects is a challenge in all research on long-term effects of military service. Previous research showed that Vietnam War-era veterans have PTSD at high rates, and this condition has been linked to early death.<sup>31</sup> A potential source of bias in this study is that mortality rates before the survey might have been higher among those with PTSD. If veterans who served in Vietnam are more likely to experience PTSD, then this effect would tend to reduce the magnitude of the observed effect associated with the exposure. The data were cross-sectional and do not provide a basis for causal inferences.

The survey used for this research did not include information about respondents' ranks or military specialties. Therefore, we were not able to control for these characteristics. This omission is a potential limitation. It is likely that veterans who served in Vietnam were at greater risk of adverse mental health following their service, regardless of rank, because of the social and political environment they experienced upon their return, as others have found.<sup>5,23</sup> Furthermore, military rank structure is fixed, based on unit authorizations; the ratio of enlisted personnel to officers has always remained constant, and this ratio would be seen regardless of whether a unit served in Vietnam or elsewhere, as well as in most units rotated in for a tour of duty.<sup>5</sup> In addition, the mixture of occupational specialties in Vietnam units would be nearly identical to that of units serving elsewhere. For example, an infantry battalion in Vietnam would have the same number of soldiers in various military occupational specialties as one stationed in Germany or elsewhere.<sup>5</sup>

The findings of this study show that veterans who served in Vietnam have notably poorer mental health than do those who served elsewhere during the same period, a full 28 years after the end of combat. The prevalence of PTSD (12.2%) was notably higher among younger veterans who served in Vietnam than in the U.S. population generally, in which the 12-month prevalence was measured at 3.5%.<sup>32</sup> Research suggests that events such as the Persian Gulf War and the Iraq War may trigger memories for Vietnam War-era veterans, stimulating recurrent PTSD.<sup>33</sup> Currently, there are ~2.6 million veterans who served in Vietnam. As these veterans age-in to Medicare eligibility (occurring in 2007 for the average Vietnam veteran), they will bring a large demand for services. These veterans will require care in both VA and

non-VA primary care and mental health settings. From the perspective of clinicians, these findings underscore the importance of inquiring about military service and performing a thorough mental health assessment for patients, to detect mental health problems and to provide treatment or referral.<sup>34,35</sup> Furthermore, there is growing evidence that PTSD is associated with physical health problems such as heart disease.<sup>4</sup> Therefore, clinicians should closely examine Vietnam War veterans with mental health concerns for physical health problems. Also from a clinical practice perspective, the lessons learned from these veterans' experiences may apply to veterans of the current Iraq War. Early evidence suggests that returning Iraq War veterans experience a very high prevalence of PTSD. Initial studies showed current PTSD prevalence rates of 18% for veterans returning from Iraq and 11% for those returning from Afghanistan.<sup>36-38</sup> The experience of Vietnam veterans suggests that proper mental health screening and care should be readily available, to allow these veterans to experience better long-term outcomes and to remove the stigma associated with seeking help.<sup>39</sup>

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# Pentagon Report Criticizes Troops' Mental-Health Care

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By Ann Scott Tyson  
Washington Post Staff Writer  
Saturday, June 16, 2007; A02

U.S. troops returning from combat in Iraq and Afghanistan suffer "daunting and growing" psychological problems -- with nearly 40 percent of soldiers, a third of [Marines](#) and half of the National Guard members reporting symptoms -- but the military's cadre of mental-health workers is "woefully inadequate" to meet their needs, a Pentagon task force reported yesterday.

The congressionally mandated task force called for urgent and sweeping changes to a peacetime military mental health system strained by today's wars, finding that hundreds of thousands of the more than 1 million U.S. troops who have served at least one war-zone tour in [Iraq](#) or [Afghanistan](#) are showing signs of post-traumatic stress disorder (PTSD), depression, anxiety or other potentially disabling mental disorders.

"Not since [Vietnam](#) have we seen this level of combat," said Vice Adm. Donald Arthur, co-chairman of the Department of Defense Mental Health Task Force. "With this increase in . . . psychological need, we now find that we have not enough providers in our system," he said at a Pentagon news conference yesterday unveiling the report. "Clearly, we have a deficit in our availability of mental-health providers."

The ongoing "surge" of more than 30,000 additional U.S. troops in Iraq and Afghanistan will exacerbate this gap, as will the rapid growth in the number of soldiers, Marines and other troops -- now about half a million -- who have served more than one combat tour, heightening the risk of mental illnesses, the report said.

As in the aftermath of Vietnam, the costs of untreated mental illness will rise dramatically over time, the report warned. "Our nation learned this lesson, at a tragic cost," it said. "The time for action is now."

[Defense Secretary Robert M. Gates](#) is required by law to develop a plan of action within six months on the 95 recommendations included in the 64-page report.

The task force, composed of seven military and seven civilian professionals with expertise in military mental health, was formed in May 2006. It based its report on visits to 38 [U.S. military](#) care facilities in the [United States](#), [Europe](#) and [Asia](#); interviews with care providers, military personnel and their families and commanders; as well as expert testimony and research.

The task force found that 38 percent of soldiers, 31 percent of Marines, 49 percent of [Army National Guard](#) members and 43 percent of Marine reservists reported symptoms of PTSD, anxiety, depression or other problems, according to military surveys completed this year by service members 90 and 120 days after returning from deployments.

Two "signature injuries" from Iraq and Afghanistan are PTSD and traumatic brain injury, it said. Symptoms

include nightmares and other sleep problems, trouble concentrating, anger, recklessness, and self-medication with drugs and alcohol.

The task force identified several barriers to care, including the stigma associated with seeking help, poor access to providers and facilities, and disruptions in care as service members move locations.

"Stigma in the military remains pervasive and often prevents service members from seeking needed care," the report said, citing anonymous surveys that show most members with symptoms of mental health problems do not seek help.

Some soldiers underreport problems because they want to stay with their units, and military officials note that many soldiers undergoing treatment for stress or other mental problems are allowed to deploy again after a screening to determine the intensity of their symptoms or depending on what medications they are taking. Those on lithium, for example, should not deploy while those on another class of medications similar to [Prozac](#) may be able to, said Army Col. Elspeth Cameron Ritchie, who assisted the task force.

"If you have a post-traumatic stress reaction, it's not your fault," Arthur said. "It's up to leadership to say to folks that post-traumatic stress reactions are an absolutely normal part of combat operations."

Proposals by the task force to reduce stigma include embedding health-care providers with units and offering treatment at primary medical care facilities, where service members can seek psychological help without singling themselves out. An additional recommendation is for the military to begin training troops to become more psychologically resilient, in part by conditioning them mentally, much as they conduct their physical training.

"We can use virtual-reality therapy, typing smells in to create a virtual environment," that resembles a battlefield, said Col. Jonathan H. Jaffin, commander of Army medical research.

National Guard and reserve members -- who often live far from military bases and return from deployments to rural communities -- face "particularly constrained" access to clinical care as well as to the military chaplains and family support networks that active-duty personnel can tap, the report said.

"The current complement of mental health professionals is woefully inadequate" to prevent and treat members of the military and their families, the report said. But it called the process for recruiting additional trained personnel -- both civilian and military -- "time consuming and cumbersome," stating for example that the number who could be recruited over the next six months would be "well below" the number required to meet the needs.

The shortage is deepening as active-duty mental-health professionals, also stressed by repeated deployments and other frustrations, are leaving the military in growing numbers, the report said. The Air Force has lost 20 percent of mental health workers from 2003 to 2007, while the Navy lost 15 percent between 2003 and 2006, and the Army lost 8 percent from 2003 to 2005.

Financial resources for mental health treatment in the military are also lacking, the report found. Congress provided a boost of \$600 million for PTSD and traumatic brain injury in the 2007 supplemental war funding, but more will be needed, S. Ward Casscells, assistant secretary of defense for health affairs, said at the news conference.

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## Military Diagnosing More Post-Traumatic Stress

By Ann Scott Tyson  
Washington Post Staff Writer  
Wednesday, May 28, 2008; A02

The number of U.S. troops diagnosed by the military with post-traumatic stress disorder (PTSD) jumped nearly 50 percent in 2007 over the previous year, as more of them served lengthy and repeated combat tours in Iraq and Afghanistan, Pentagon data released yesterday show.

The increase brings the total number of U.S. troops diagnosed by the military with PTSD after serving in one of the two conflicts from 2003 to 2007 to nearly 40,000.

The vast majority of those diagnosed served in the Army, which had a total of 28,365 cases, including more than 10,000 last year alone. The [Marine Corps](#) had the second highest number, with 5,581 total and 2,114 last year. The Air Force and Navy had fewer than 1,000 cases each last year, according to the data from the Office of the Surgeon General on a chart released by the Army.

Military officials cautioned that the numbers represent only a small fraction of all service members who have PTSD because not included are those diagnosed by [Department of Veterans Affairs](#) workers or civilian caregivers, and those who avoid seeking care out of concern over stigma or damage to their careers.

"We're in our infancy right now of fully knowing what the extent of this is," [Lt. Gen. Eric Schoomaker](#), the Army surgeon general, told defense reporters yesterday.

Service members with PTSD often feel constantly under threat, experience nightmares or intrusive thoughts in which they relive the horrors of losing comrades or being wounded in combat, and grow emotionally numb, causing their intimate relationships to suffer.

The military, like the country as a whole, faces a shortage of specialized health personnel to treat the growing ranks of troops with PTSD.

"As a nation . . . our mental health facilities and access to mental health providers is not adequate for the need right now," Schoomaker said. He said the Army is seeking to narrow the gap and has hired 180 of a planned 300 additional mental health specialists.

The incidence of PTSD grew last year as more U.S. troops were exposed to combat -- with force levels in Iraq and Afghanistan reaching more than 170,000 and 27,000, respectively. Also contributing were a lengthening of war zone rotations from 12 to 15 months and the rise in the number of troops serving repeated tours, which sharply increases the likelihood troops will experience symptoms of PTSD.

The military's ability to track the cases has also improved with the creation of an electronic medical-care record

system in 2004, Schoomaker said.

As many as 30 percent of deployed soldiers suffer symptoms of PTSD, but the majority are expected to improve with early and appropriate treatment, he said.

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## Social Workers Help Military Families

by [Tori DeAngelis](#)

Military families who remain at home don't command the same attention as their deployed loved ones, who are shown on TV in the thick of battle, fighting Iraqi troops or storming one of Saddam Hussein's presidential palaces. The strength and cohesiveness of soldiers' families, however, are vital to troops' success in the field--a secret social workers have known for a long time, and that fuels their work during wartime.

As the second Gulf War continues, social workers in all branches of the military are helping families and military personnel prepare for, and cope with, the ravages of war. They do so through a range of preventive and clinical services and programs, including family-support programs and mental-health counseling. When soldiers return home, social workers in the Department of Veterans Affairs are prepared to help them — and their families — reconnect with society and with each other, and to get psychological help if needed.

"More than any other clinicians who work for the VA, social workers are the ones who most often work with families," says Jill Manske, ACSW, LISW, director of social work services in the Veterans' Affairs headquarters in Washington, D.C. "We're the liaisons between the families and the VA, between the families and communities--we're the resource people," she adds. "It's really important for us to be as knowledgeable as we can, because if we don't know what's out there, we can't help them."

Indeed, at VA hospitals and in military installations across the country, Manske and thousands of other social workers are doing just that: gathering important resources and implementing programs so military personnel can return to a healthy civilian life and to families who have remained strong during their absence.

### Aiding military personnel

Military bases are up and running with a range of social work programs, some of which are geared specifically to war, to help military families according to Lt. Col. Dexter R. Freeman, DSW, LCSW-C, ACSW, chief of the Department of Social Work at Fort Hood, Texas, one of the nation's largest military installations.

On the prevention end, these programs include family and parent support groups and centers. On the treatment end, clinical services include marriage and family counseling and therapy for people prone to domestic violence, child abuse, and neglect. During wartime, preventative and treatment services expand to accommodate the increasing levels of stress associated with war, Freeman says. Rapid deployment, like that taking place during the current war, is one such stressor.

"People who are in the process of deploying, who also have unresolved family issues," he notes, "are more vulnerable to abusive incidents, especially if they are not ready for that change."

In addition to providing counseling to deploying soldiers who may need it, military social workers also use a tried-and-true social work strategy for those remaining at home: connecting them with support systems, Freeman says. "Isolation is what kills families," he explains, "so we try to ensure that families have access to services that help them understand they are not alone." Many military installations, for example, have family-readiness programs designed to help family members access the military's extensive support systems. The programs, Freeman says, team up older military families with younger ones to provide younger families with emotional support, as well as with financial and practical resources.

Since the start of the war, military bases also have activated family-assistance centers, staffed with specialists including social workers, chaplains, and child-development specialists, Freeman continues. These helpers can address the specialized needs of military families, from child care

and child behavior issues to financial matters.

In the field, social workers play a different role, helping soldiers and commanders maintain the morale necessary to keep units at full fighting strength, Freeman notes. Here too, families are an important part of the picture. "Social workers help the troops focus on their mission without being overwhelmed with family-related problems," he says.

Social workers accomplish this in two ways. In a preventive capacity, they assess the troops' mood and recommend ways of improving morale to commanders. In a clinical capacity, along with other mental health personnel, social workers treat soldiers when mental-health problems arise during the stress of battle. Common problems that crop up, he notes, include substance abuse, depression, and anxiety.

### A different kind of war

In addition to traditional social work strategies and programs used during wartime, military social workers are gearing up to address some new realities that are part of the current war and international climate.

One is the threat of biological and chemical weapons, both in the field and on the home front. To deal with this potentiality, the Department of Defense and the VA have Web pages devoted to bioterrorism, and social workers are boning up on them, says Manske. VA social workers are also drawing on elements of a national VA disaster response plan created after September 11, 2001, to develop a similar plan addressing what to do in the event of domestic terrorism, she says.

"We want to have programs in place," Manske notes, "so that if there is a disaster or a need to provide emergency services, social workers are familiar with the available resources, and can make things happen on very short notice."

Unlike previous wars, Gulf War II involves many young troops — including young women — many who have young children, Manske notes. "We'll be dealing with a lot of young women coming back from war, some of whom are injured," Manske says. "They are going to be very different from the patient populations we've treated before. We are starting to gear up to make sure we have all the services in place that these women will need."

### How VA social workers are helping

During the first Gulf War, Manske notes, VA social workers received federal authority to work with military families before military personnel returned. While that may happen again, so far it hasn't, she says. VA social workers are therefore doing what they can, undertaking activities that will ensure they're ready once the troops return home, she says, and helping families in specific ways before then. One key role social workers play is connecting military families with vital community resources like childcare, transportation, and finances, Manske adds. This is especially important for families of reservists, who may not be well-connected with DoD services.

VA social workers also are touching base with DoD social workers, "to let them know we're available and ready to help," Manske says. In fact, the VA and DoD have common projects under way, including a joint training conference on disaster response to be held next year, and a VA-created satellite broadcast that has trained both VA and DoD social workers on the psychological impact of war.

VA social workers also are holding in-service meetings for VA staff who do not work in mental health, to help them recognize symptoms of post-traumatic stress in patients and themselves, says Judith Talbert, ACSW, LISW, care line manager for mental health at the Chalmers P. Wylie VA Outpatient Clinic, in Columbus, Ohio. This skill will become increasingly important, she adds, as returning veterans start flooding VA hospitals.

"We're doing this," she explains, "so the screening process is better and more accurate once soldiers return."

VA social workers are also partnering with the Fisher House Foundation to spread the word about a valuable link on the organization's Web site among VA social workers. At [www.fisherhouse.org](http://www.fisherhouse.org), a link titled "Support our troops" gives "all kinds of ideas on helping military and veteran families,"

including sending e-mail messages to wounded soldiers in military hospitals, Manske says. Fisher House Foundation, which recently lost a trustee, Anthony Fisher, to a plane crash, builds and donates Fisher Houses to the DoD and VA to lodge family members of hospitalized active duty personnel and veterans.

Military and VA social workers have a long history of dealing with military personnel and war veterans, and are also getting up to speed on some new realities, notes Sandra Brake, MSW, ACSW, social work program manager at VA headquarters in Washington.

" This is a terribly stressful time for these families, particularly in a conflict like this when many Reservists are called up," she says. "In every area, social workers are gearing up to serve the men and women who will be returning."

Tori DeAngelis is a freelance writer who has written for Psychology Today, Common Boundary, the APA Monitor and other publications. She lives in Syracuse, N.Y.

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## New Focus on Military Social Work

10/23/08

The School of Social Work program, the first of its kind at a major research university, garners \$3.3 million in government funding.

By Cynthia Monticue

The USC School of Social Work has created a specialization in military social work and veteran services to prepare social workers and other trained mental health professionals to help the nation's armed forces personnel, military veterans and their families manage the pressures of military life and postwar adjustments.

Rep. Lucille Roybal-Allard (D-Calif.) secured \$3.3 million in funding for the program.

"By training social workers who are uniquely attuned to military life and the needs of returning veterans, USC's military social work program will fill a void in the care we provide armed forces personnel," she said. "Veterans returning from Iraq and Afghanistan have bravely served our country, and now it is our responsibility to step up and serve them."

The military social work program, to hold its first classes next fall, will be housed in the new USC San Marcos Academic Center in north San Diego County, down the road from Camp Pendleton, where 60,000 military and civilian personnel work every day.

"The country doesn't have sufficient resources to respond to the current health and mental health needs of our returning soldiers, so the immediate training of professionals is critical," said Marilyn Flynn, dean of the USC School of Social Work. "Our program will prepare professionals to help our service members deal with the impact of battlefield conditions and anticipate their emotional needs upon returning to civilian life."

A 2007 report issued by the American Psychological Association's Presidential Task Force on Military Deployment Services for Youth, Families and Service Members found a severe shortage of social workers and other mental health professionals trained in the nuances of military life and that those who are highly qualified often experience burnout due to the demands placed on them.

The USC program, which Flynn said is the first military social work program in the country at a major research university, will be available as a specialized area of study for master of social work students and as a postgraduate certificate for individuals with significant clinical social work practice experience.

The specialization also will be offered to students enrolled in the school's nurse social work practitioner option, a program for registered nurses with bachelor of nursing degrees who are pursuing a master's degree in social work and a case management certificate.

Beyond the foundation course requirements of the MSW degree, students will take a series of highly specialized classes emphasizing the military as a workplace culture, the management of trauma and post-traumatic stress, clinical practice with the military family, and preventative care and health management in military settings.

Students will round out their training with electives on disabilities and family caregiving; domestic violence; loss, grief and bereavement; spirituality; and substance abuse and other addictive disorders.



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Clinical associate professor Jose Coll, left, and Vice Dean Paul Maiden, right, consult with Lt. Colonel Jeff Yarvis of the U.S. Army.

Photo/Brian Goodman

Also part of the curriculum: visits to military installations and veterans facilities, a base family services unit, a military correctional facility, and a veterans center or Veterans Affairs department. Graduates with military social work training will be able to immediately fulfill a variety of responsibilities, including the counseling of deploying or returning soldiers; helping individuals cope with post-traumatic stress and disabilities; enhancing life skills related to parenting, stress management, conflict resolution and suicide prevention; and connecting military families with vital community resources such as child care, transportation and finances.

In the field, social workers can help soldiers maintain the morale of combat units and more effectively cope with traumatic battlefield experiences.

More than 20 national and community advisers with specific military experience, ranging from active and retired armed forces personnel to clinical social workers and educators, helped develop the curriculum. Directing the program is clinical associate professor Jose Coll, a Marine Corps veteran who went to school with the aid of the G.I. bill and authored the recent book, *A Civilian Counselor's Primer for Counseling Veterans*.

The School of Social Work is collaborating with the USC Institute for Creative Technologies to use some of its immersive technologies to train social workers and treat patients. In related research, the institute has created virtual patients to aid clinicians in their interviewing and diagnostic skills. The institute also developed a virtual reality exposure therapy to treat soldiers and veterans suffering from post-traumatic stress syndrome.

"We began the military social work program as a response to the rapidly growing demand for trained social workers who can address the mental health needs of returning war fighters," said Paul Maiden, vice dean of the USC School of Social Work. "Our intent is to help facilitate healthy reintegration into their families, workplace and communities."