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MT2K SURVEYS REGARDING COMPUTER LITERACY

FREQUENCY TABLES

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OCTOBER 2000

UNITED STATES ARMY
MEDICAL DEPARTMENT CENTER AND SCHOOL
FORT SAM HOUSTON, TEXAS 78234-6125

CENTER FOR
HEALTHCARE EDUCATION AND STUDIES
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MEDIC TRAINING 2000 (MT2K) SURVEYS REGARDING COMPUTER LITERACY

FREQUENCY TABLES

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13. ABSTRACT *(Maximum 200 words)*

This report presents results not included in the "MEDIC Training 2000" final report (HR00-001A). The study assessed the readiness of combat medics in performing core life-saving skills (Phase I), examined an alternative method for Advance Individual Training of combat medic students (Phase II), determined the effect of a self-directed multi-media sustainment training package on combat medic readiness (Phase III), and tested the feasibility of a method for measuring effectiveness of unit training programs. The current report is concerned only with computer-related questions that were asked in surveys administered during Phases I and III. Questions covered proficiency of combat medics in performing computer skills, their on-the-job access to computers, and the types of computer systems available to them. Respondents were located at four installations and consisted of combat medics with 1-4 years experience (n=347), their direct-line supervisors (n=255), and newly graduated combat medics (n-127). Response data are summarized in frequency tables.

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INTRODUCTION

Recently, the AMEDD Studies and Analysis Branch, Center for Healthcare Education and Studies (CHES), Fort Sam Houston, Texas, completed a study entitled "MEDIC Training 2000 (MT2K)" (see CHES Report #HR00-001B, April 2000). The study assessed the readiness of combat medics in performing core life-saving skills (Phase I), examined an alternative method for advanced individual training of combat medic students (Phase II), determined the effect of a self-directed multi-media sustainment training package on combat medic readiness (Phase III), and tested the feasibility of a method for measuring the effectiveness of unit training programs.

The current report summarizes results not included in the final study report. It is concerned only with computer-related questions that were asked in surveys administered in Phases I and III of the study. The questions covered proficiency of combat medics in performing computer skills, their on-the-job access to computers, and the types of computer systems available to them.

METHOD

Experienced combat medics (n=347) and their direct-line supervisors (n=255) were surveyed in Phase I. New combat medics (n=127) were surveyed in Phase III. Experienced combat medics had a minimum of one year of experience since graduating from the 91B10 medic course. New combat medics had less than one year of experience and were among the newly graduated students from Phase II of the MT2K study. There were four study sites in Phases I and III: Fort Bragg, North Carolina; Fort Carson, Colorado; Fort Hood, Texas; and Fort Lewis, Washington.

The combat medics and direct-line supervisors were surveyed regarding barriers to sustainment training, available resources for sustainment training, and the perceived preparation of combat medics to perform in a combat mission. Survey instruments consisted of (1) the Experienced Combat Medic Questionnaire (Phase I), (2) the Combat Medic Direct-Line Supervisor Questionnaire (Phase I), and (3) the Experienced Combat Medic Questionnaire (Phase III). Two to three computer-related questions were on each of these surveys.

All questionnaires used closed-ended questions. Half of these questions were presented in the simplest (yes, no, don't know) format, or just as a dichotomous (yes, no) scale. There were questions about the total number of computer systems available in each unit. Questions concerning computer skills were designed on a 5-point numerical scale.

This report consists of simple frequency distributions. Combat medic responses were tabulated by study location and overall. However, since no identifying information was collected on the direct-line supervisor surveys, their responses were only tabulated overall.

The computer-related questions as they appeared on the original surveys are shown below by study phase and respondent group.

Phase I: Experienced Combat Medic

15. In performing your job, do you have access to a computer? (Circle one number)

    1. Yes
    2. No

16. From options 1 through 5 below, select your proficiency in performing computer skills listed below.

    Options:
    1. Unable to perform
    2. Perform with continuous assistance
    3. Perform with moderate assistance
    4. Perform with minimal assistance
    5. Proficient in computer skills, no assistance needed

Computer Skills	**Circle one number**				
a. Use E-mail to send and receive messages	1	2	3	4	5
b. Word processing programs such as Word or Word Perfect	1	2	3	4	5
c. Surf the Internet	1	2	3	4	5
d. Operate hospital automated systems such as CHCS (Composite Health Care System)	1	2	3	4	5

Computer Systems. Please identify the types of computer systems available to 91B10 medics in your unit. This information will be used to understand the possibility of delivering distance learning training to the medic.

50. Please describe the types of computer systems available for you to use in your unit.
    Circle **Yes, No, or UK (don't know)** and fill in the **blanks** below.

Circle one letter for each category

	How many	LAN/Modem			Internet			CD-ROM		
a. 386	____	Yes	No	UK	Yes	No	UK	Yes	No	UK
b. 486	____	Yes	No	UK	Yes	No	UK	Yes	No	UK
c. Pentium	____	Yes	No	UK	Yes	No	UK	Yes	No	UK

Phase I: Direct-Line Supervisor

7. From options 1 through 5 below, select your 91B10 medic's proficiency in performing computer skills listed below.

Options:

1. Unable to perform
2. Perform with continuous assistance
3. Perform with moderate assistance
4. Perform with minimal assistance
5. Proficient in computer skills, no assistance needed

Computer Skills	**Circle one number**				
a. Use E-mail to send and receive messages	1	2	3	4	5
b. Word processing programs such as Word or Word Perfect	1	2	3	4	5
c. Surf the Internet	1	2	3	4	5
d. Operate hospital automated systems such as CHCS (Composite Health Care System)	1	2	3	4	5

Computer Systems. Please identify the types of computer systems available to 91B10 medics in your unit. This information will be used to understand the possibility of delivering distance learning training to the medic.

50. Please describe the types of computer systems available for you to use in your unit. Circle **Yes, No, or UK (don't know)** and fill in the **blanks** below.

Circle one letter for each category

	How many	LAN/Modem	Internet	CD-ROM
a. 386	____	Yes No UK	Yes No UK	Yes No UK
b. 486	____	Yes No UK	Yes No UK	Yes No UK
c. Pentium	____	Yes No UK	Yes No UK	Yes No UK

Phase III: New Combat Medics

Proficiency is the knowledge and skill to perform to a standard safely without assistance of supervision.

6. From options 1 through 5 below, select your proficiency in performing computer skills listed below.

Options:

1. Unable to perform
2. Perform with continuous assistance
3. Perform with moderate assistance
4. Perform with minimal assistance
5. Proficient in computer skills, no assistance needed

Computer Skills	**Circle one number**				
a. Use E-mail to send and receive messages	1	2	3	4	5
b. Word processing programs such as Word or Word Perfect	1	2	3	4	5
c. Surf the Internet	1	2	3	4	5
d. Operate hospital automated systems such as CHCS (Composite Health Care System)	1	2	3	4	5

Computer Systems. Please identify the types of computer systems available to 91B10 medics in your unit. This information will be used to understand the possibility of delivering distance learning training to the medic.

48. Please describe the types of computer systems available for you to use in your unit. Circle **Yes, No, or UK (don't know)** and fill in the **blanks** below.

Circle one letter for each category

	How many	LAN/Modem	Internet	CD-ROM
a. 386	____	Yes No UK	Yes No UK	Yes No UK
b. 486	____	Yes No UK	Yes No UK	Yes No UK
c. Pentium	____	Yes No UK	Yes No UK	Yes No UK

RESULTS AND DISCUSSION

Responses to the questions concerning use of computers and computer literacy are summarized in the following tables by study phase and respondent group. Note that in each table, "No." refers to the number of respondents having the given answer marked; "%" refers to the percentage of responses in the column. In some of the tables, "Missing" is shown in the listing of responses. "Missing" means that some respondents left that question unanswered. If "Missing" is not shown, then all respondents answered the question.

Phase I: Experienced Combat Medics (n=347)

In Table 1, 62% of the experienced combat medics at Fort Bragg answered "Yes" to having access to a computer, while about 48% answered "Yes" at the other three study sites. Overall, 51% of all 347 experienced combat medics answered "Yes" compared to 47% who said "No" to having access.

Table 1. Experienced combat medics' on-the-job access to computers (Q15).

	Fort Bragg		Fort Carson		Fort Hood		Fort Lewis		Total	
Response	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Missing	0	(0.0)	3	(3.9)	2	(1.6)	2	(2.7)	7	(2.0)
Yes	44	(62.0)	37	(48.7)	60	(47.2)	36	(49.3)	177	(51.0)
No	27	(38.0)	36	(47.4)	65	(51.2)	35	(48.0)	163	(47.0)

Tables 2-5 summarize the responses to question 16 concerning experienced medics' perceptions of their computer proficiency. Overall, at least 30% of medics rated themselves as needing minimal or no assistance in performing the given computer skills: 51.6% in using E-mail (Table 2); 55.6% in word processing (Table 3); 55.3% in using Internet (Table 4); and 30.6% in operating hospital automated systems (Table 5). Also, overall, at least 40% of medics felt they needed more than minimal assistance. For example, to use E-mail to send and receive messages (Table 2), 51.6% rated themselves as needing minimal or no assistance (17% needed minimal assistance, 34.6% needed no assistance). However, 47% of the experienced combat medics felt they needed more than minimal assistance: 28.3% felt they were unable to perform the task, 6.6% needed continuous assistance, and 12.1% needed moderate assistance. By study location, the percent needing more than minimal assistance ranged from 43.7% at Fort Bragg to 49.3% at Fort Lewis. At Fort Carson, more than a third of the medics (34.2%) rated themselves as unable to use E-mail to send and receive messages.

Table 2. Self-rated proficiency of experienced combat medics in using E-mail to send/receive messages (Q16a).

	Fort Bragg		Fort Carson		Fort Hood		Fort Lewis		Total	
Response	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Missing	0	(0.0)	3	(4.0)	1	(0.8)	1	(1.4)	5	(1.4)
Unable to perform	18	(25.3)	26	(34.2)	33	(26.0)	21	(28.8)	98	(28.3)
Perform w/continuous assistance	6	(8.5)	3	(4.0)	7	(5.5)	7	(9.6)	23	(6.6)
Perform w/moderate assistance	7	(9.9)	8	(10.5)	19	(15.0)	8	(10.9)	42	(12.1)
Perform w/minimal assistance	14	(19.7)	12	(15.8)	19	(15.0)	14	(19.2)	59	(17.0)
Proficient, no assistance needed	26	(36.6)	24	(31.6)	48	(37.8)	22	(30.1)	120	(34.6)

Following are some additional comments concerning Tables 3-5. Experienced medics rating themselves as needing minimal or no assistance in using word processing programs (Table 3) varied by study location: Fort Bragg, 62%; Fort Carson, 46.1%; Fort Hood, 56.7%; and Fort Lewis, 57.5%. Responses by study location for needing minimal or no assistance in surfing the Internet (Table 4) were almost the same as those for word processing: Fort Bragg, 61.9%; Fort Carson, 44.8%; Fort Hood, 56.7%; and Fort Lewis, 57.6%. Experienced combat medics rated themselves poorest in operating hospital automated systems (Table 5). Less than a third (30.6%) of all medics felt they could operate hospital automated systems with minimal or no assistance, ranging from 43.6% at Fort Bragg to 23.3% at Fort Lewis.

Table 3. Self-rated proficiency of experience combat medics in using word processing programs such as Word or WordPerfect. (Q16b)

	Fort Bragg		Fort Carson		Fort Hood		Fort Lewis		Total	
Response	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Missing	0	(0.0)	3	(4.0)	1	(0.8)	1	(1.4)	5	(1.4)
Unable to perform	9	(12.7)	20	(26.3)	24	(18.9)	14	(19.2)	67	(19.3)
Perform w/continuous assistance	8	(11.2)	3	(4.0)	9	(7.1)	7	(9.6)	27	(7.8)
Perform w/moderate assistance	10	(14.1)	15	(19.7)	21	(16.5)	9	(13.3)	55	(15.9)
Perform w/minimal assistance	21	(29.6)	18	(23.7)	25	(19.7)	10	(13.7)	74	(21.3)
Proficient, no assistance needed	23	(32.4)	17	(22.4)	47	(37.0)	32	(43.8)	119	(34.3)

Table 4. Self-rated proficiency of experience combat medics in surfing the Internet. (Q16c)

	Fort Bragg		Fort Carson		Fort Hood		Fort Lewis		Total	
Response	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Missing	0	(0.0)	3	(4.0)	1	(0.8)	1	(1.4)	5	(1.4)
Unable to perform	13	(18.3)	21	(27.6)	26	(20.5)	17	(23.3)	77	(22.2)
Perform w/continuous assistance	8	(11.3)	4	(5.3)	9	(7.1)	3	(4.1)	24	(6.9)
Perform w/moderate assistance	6	(8.5)	14	(18.4)	19	(15.0)	10	(13.7)	49	(14.1)
Perform w/minimal assistance	17	(23.9)	11	(14.5)	21	(16.5)	11	(15.1)	60	(17.3)
Proficient, no assistance needed	27	(38.0)	23	(30.3)	51	(40.2)	31	(42.5)	132	(38.0)

Table 5. Self-rated proficiency of experience combat medics in operating hospital automated systems such as CHCS (Composite Health Care System). (Q16d)

	Fort Bragg		Fort Carson		Fort Hood		Fort Lewis		Total	
Response	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Missing	0	(0.0)	3	(4.0)	1	(0.8)	1	(1.4)	5	(1.4)
Unable to perform	25	(35.2)	35	(46.1)	61	(48.0)	34	(46.6)	155	(44.7)
Perform w/continuous assistance	7	(9.9)	6	(7.9)	1	(10.2)	8 3	(11.0)	34	(9.8)
Perform w/moderate assistance	8	(11.3)	9	(11.8)	17	(13.4)	13	(17.8)	47	(13.5)
Perform w/minimal assistance	14	(19.7)	12	(15.8)	15	(11.8)	5	(6.9)	46	(13.3)
Proficient, no assistance needed	17	(23.9)	11	(14.5)	20	(15.8)	12	(16.4)	60	(17.3)

Table 6 summarizes the numbers and types of computer systems experienced combat medics reported as available for them to use in their unit. Note that the computer counts are for the total number of 386s, 486s, and pentium models that are available in a medic's unit. Information on the number of computers with LAN/Modem, Internet access, or CD-ROMs was not requested in the survey. About 50% of all surveys had no reponse for the number of computers available, which may have been from confusion on whether the count was for all computers or only for those with features such as "With Internet."

Overall, for each of the three computer models, approximately 16% of experienced combat medics reported that no computers were available in their units for them to use. Other responses ranged from 1 to 50 computers being available, but only a few medics (less than 2%) reported having more than three computers in the unit available for their use. Overall and by study location, less than 10% of experienced combat medics reported having 386 or 486 computers with LAN/modem, Internet access, or CD-Rom features. However, between 10-13% of all medics reported having Pentiums with these features, while by study location, the highest percentage of medics reporting a feature was at Fort Bragg, where 18.2% reported having the LAN/modem feature.

Table 6. Distribution of experienced combat medics' responses to question on computer systems available for them to use in their unit. (Q50)

	Number of Medics Responding by Study Location									
	Fort Bragg		Fort Carson		Fort Hood		Fort Lewis		Total	
Computer Description	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
386 Computers (Q50a)										
Number of computers										
Missing	53	(74.7)	54	(71.1)	84	(66.1)	52	(71.2)	243	(70.0)
0	12	(16.9)	12	(15.8)	21	(16.5)	12	(16.4)	57	(16.4)
1	5	(7.0)	8	(10.5)	13	(10.2)	4	(5.5)	30	(8.6)
2	0	(0.0)	0	(0.0)	3	(2.4)	2	(2.7)	5	(1.4)
3	1	(1.4)	0	(0.0)	4	(3.2)	1	(1.4)	6	(1.7)
4	0	(0.0)	0	(0.0)	1	(0.8)	1	(1.4)	2	(0.6)
6	0	(0.0)	0	(0.0)	0	(0.0)	1	(1.4)	1	(0.3)
7	0	(0.0)	1	(1.3)	0	(0.0)	0	(0.0)	1	(0.3)
9	0	(0.0)	0	(0.0)	1	(0.8)	0	(0.0)	1	(0.3)
12	0	(0.0)	1	(1.3)	0	(0.0)	0	(0.0)	1	(0.3)
With LAN/Modem										
Missing	22	(31.0)	27	(35.5)	47	(37.0)	14	(19.2)	110	(31.7)
Unknown	18	(25.4)	16	(21.1)	23	(18.1)	20	(27.4)	77	(22.2)
Yes	3	(4.2)	5	(6.6)	11	(8.7)	6	(8.2)	25	(7.2)
No	28	(39.4)	28	(36.8)	46	(36.2)	33	(45.2)	135	(38.9)
With Internet										
Missing	22	(31.0)	27	(35.5)	49	(38.6)	20	(27.4)	118	(34.0)
Unknown	19	(26.8)	21	(27.6)	35	(27.6)	22	(30.1)	97	(28.0)
Yes	5	(7.0)	2	(2.6)	8	(6.3)	7	(9.6)	22	(6.3)
No	25	(35.2)	26	(34.2)	35	(27.6)	24	(32.9)	110	(31.7)
With CD-ROM										
Missing	22	(31.0)	27	(35.5)	49	(38.6)	20	(27.4)	118	(34.0)
Unknown	19	(26.8)	22	(29.0)	32	(25.2)	22	(30.1)	95	(27.4)
Yes	4	(5.6)	2	(2.6)	9	(7.1)	4	(5.5)	19	(5.5)
No	26	(36.6)	25	32.9	37	29.1	27	(37.0)	115	(33.1)
486 Computers (Q50b)										
Number of computers										
Missing	52	(73.2)	56	(73.7)	90	(70.9)	58	(79.5)	256	(73.8)
0	11	(15.5)	10	(13.2)	20	(15.8)	13	(17.8)	54	(15.6)
1	7	(9.9)	8	(10.5)	14	(11.0)	1	(1.4)	30	(8.6)
2	0	(0.0)	1	(1.3)	1	(0.8)	0	(0.0)	2	(0.6)
3	1	(1.4)	0	(0.0)	1	(0.8)	0	(0.0)	2	(0.6)
4	0	(0.0)	1	(1.3)	0	(0.0)	0	(0.0)	1	(0.3)
9	0	(0.0)	0	(0.0)	1	(0.8)	0	(0.0)	1	(0.3)
50	0	(0.0)	0	(0.0)	0	(0.0)	1	(1.4)	1	(0.3)

Table 6. Distribution of experienced combat medics' responses to question on computer systems available for them to use in their unit. (Q50) (continued)

Computer System Response	Number of Medics Responding by Study Location: Fort Bragg No.	Fort Bragg (%)	Fort Carson No.	Fort Carson (%)	Fort Hood No.	Fort Hood (%)	Fort Lewis No.	Fort Lewis (%)	Total No.	Total (%)
486 Computers (Q50b)										
With LAN/Modem										
Missing	21	(29.6)	29	(38.2)	47	(37.0)	24	(32.9)	121	(34.9)
Unknown	19	(26.8)	17	(22.4)	24	(18.9)	19	(26.0)	79	(22.8)
Yes	3	(4.2)	3	(4.0)	11	(8.7)	1	(1.4)	18	(5.2)
No	28	(39.4)	27	(35.5)	45	(35.4)	29	(39.7)	129	(37.2)
With Internet										
Missing	22	(31.0)	29	(38.2)	51	(40.2)	30	(41.1)	132	(38.0)
Unknown	20	(28.2)	21	(27.6)	33	(26.0)	19	(26.0)	93	(26.8)
Yes	5	(7.0)	0	(0.0)	6	(4.7)	3	(4.1)	14	(4.0)
No	24	(33.8)	26	(34.2)	37	(29.1)	21	(28.8)	108	(31.1)
With CD-ROM										
Missing	22	(31.0)	30	(39.5)	50	(39.4)	31	(42.5)	133	(38.3)
Unknown	19	(26.8)	19	(25.0)	33	(26.0)	19	(26.0)	90	(25.9)
Yes	4	(5.6)	4	(5.3)	7	(5.5)	1	(1.4)	16	(4.6)
No	26	(36.6)	23	(30.3)	37	(29.1)	22	(30.1)	108	(31.1)
Pentiums (Q50c)										
Number of computers										
Missing	48	(67.6)	54	(71.1)	91	(71.7)	51	(69.9)	244	(70.3)
0	9	(12.7)	10	(13.2)	23	(18.1)	13	(17.8)	55	(15.9)
1	8	(11.3)	7	(9.2)	7	(5.5)	5	(6.9)	27	(7.8)
2	3	(4.2)	2	(2.6)	5	(3.9)	2	(2.7)	12	(3.5)
3	1	(1.4)	3	(4.0)	0	(0.0)	0	(0.0)	4	(1.2)
7	0	(0.0)	0	(0.0)	0	(0.0)	1	(1.4)	1	(0.3)
10	1	(1.4)	0	(0.0)	0	(0.0)	0	(0.0)	1	(0.3)
22	0	(0.0)	0	(0.0)	1	(0.8)	0	(0.0)	1	(0.3)
50	0	(0.0)	0	(0.0)	0	(0.0)	1	(1.4)	1	(0.3)
With LAN/Modem										
Missing	15	(21.1)	25	(32.9)	46	(36.2)	18	(24.7)	104	(30.0)
Unknown	16	(22.5)	18	(23.7)	23	(18.1)	19	(26.0)	76	(21.9)
Yes	13	(18.3)	8	(10.5)	16	(12.6)	6	(8.2)	43	(12.4)
No	27	(38.0)	25	(32.9)	42	(33.1)	30	(41.1)	124	(35.7)
With Internet										
Missing	16	(22.5)	25	(32.9)	52	(40.9)	27	(37.0)	120	(34.6)
Unknown	23	(32.4)	22	(29.0)	28	(22.1)	18	(24.7)	91	(26.2)
Yes	10	(14.1)	4	(5.3)	12	(9.5)	9	(12.3)	35	(10.1)
No	22	(31.0)	25	(32.9)	35	(27.6)	19	(26.0)	101	(29.1)
With CD-ROM										
Missing	17	(23.9)	24	(31.6)	50	(39.4)	26	(35.6)	117	(33.7)
Unknown	20	(28.2)	18	(23.7)	24	(18.9)	19	(26.0)	81	(23.3)
Yes	11	(15.5)	10	(13.2)	16	(12.6)	8	(11.0)	45	(13.0)
No	23	(32.5)	24	(31.6)	37	(29.1)	20	(27.4)	104	(30.0)

Phase I: Direct-Line Supervisors (n=255)

Direct-line supervisors of experienced combat medics were asked questions concerning the computer proficiency of—and computer resources available to—combat medics in their unit. Their responses applied to an average medic in their unit rather than to a specific individual. Over half of the direct-line supervisors reported that combat medics required more than minimal assistance on each of the four listed computer skills. Medic proficiency in operating hospital

automated systems rated the lowest, with 68.6% of the direct-line supervisors reporting their combat medics needed more than minimal assistance to perform this task. The supervisors rated the combat medics as most proficient in using word processing programs with 40% of the supervisors reporting their medics as needing minimal or no assistance.

Table 7. Distribution of direct-line supervisors' responses on proficiency of experienced 91B10 combat medics in perfoming computer skills in their units (Q7a-d).

Response	Use E-mail to Send/Rcv Msgs		Word Processing Programs		Surf the Internet		Operate Hospital Autom. Systems	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Missing	14	(5.5)	10	(3.9)	14	(5.5)	12	(4.7)
Unable to perform	91	(35.7)	38	(14.9)	72	(28.2)	103	(40.4)
Perform w/continuous assistance	37	(14.5)	46	(18.0)	35	(13.7)	27	(10.6)
Perform w/moderate assistance	32	(12.5)	59	(23.1)	43	(16.9)	45	(17.6)
Perform w/minimal assistance	42	(16.5)	73	(28.6)	40	(15.7)	39	(15.3)
Proficient, no assistance needed	39	(15.3)	29	(11.4)	51	(20.0)	29	(11.4)

Many of the direct-line supervisors did not answer the questions concerning computer systems available to the combat medics in their unit (Tables 8-9). Approximately 60% of the responses were missing for the 386 and 486 computers, while 46% of the responses were missing for the pentium computers (Table 8). For each of the computer models, more than 10% of the supervisors reported that no computers of that model were available to their medics; 17.3% reported no 386s, 16.1% no 486s, and 14.5% reported no pentiums. Most supervisors who provided counts of available computers, reported from 1 to 3 of each model. Three out of 255 supervisors reported 100 pentium computers available for medic use—the largest number of single type computers reported. LAN/modem, Internet access, and CD-ROM features were reported more often for the pentium models than for the 386s and 486s (Table 9): about 32% of the supervisors indicated these features were available on pentiums, compared to about 12% reporting them on the 486s and 7% on the 386s.

Tables 8. Direct-line supervisors' responses on number of computers available to 91B10 medics in their unit. (Q50)

Number of 386s	Supervisors Responsing		Number of 486s	Supervisors Responding		Number of Pentiums	Supervisors Responding	
	No.	(%)		No.	(%)		No.	(%)
Missing	157	(61.6)	Missing	157	(61.6)	Missing	118	(46.3)
0	44	(17.3)	0	41	(16.1)	0	37	(14.5)
1	31	(12.2)	1	26	(10.2)	1	57	(22.4)
2	15	(5.9)	2	18	(7.1)	2	12	(4.7)
3	3	(1.2)	3	5	(2.0)	3	18	(7.1)
5	1	(0.4)	4	1	(0.4)	4	2	(0.8)
10	2	(0.8)	5	2	(0.8)	6	1	(0.4)
20	2	(0.8)	6	1	(0.4)	7	1	(0.4)
			9	1	(0.4)	10	3	(1.2)
			10	1	(0.4)	12	2	(0.8)
			50	2	(0.8)	50	1	(0.4)
						100	3	(1.2)

Tables 9. Direct-line supervisors' responses on computer features available to 91B10 medics in their unit. (Q50)

Feature	Computer: 386s No.	(%)	486s No.	(%)	Pentiums No.	(%)
	Number of Supervisors Responding					
With LAN/Modem						
Missing	153	(60.0)	150	(58.8)	115	(45.1)
Unknown	58	(22.7)	43	(16.9)	37	(14.5)
Yes	20	(7.8)	38	(14.9)	80	(31.4)
No	24	(9.4)	24	(9.4)	23	(9.0)
With Internet						
Missing	152	(59.6)	153	(60.0)	113	(44.3)
Unknown	64	(25.1)	54	(21.2)	45	(17.6)
Yes	17	(6.7)	26	(10.2)	75	(29.4)
No	22	(8.6)	22	(8.6)	22	(8.6)
With CD-ROM						
Missing	151	(59.2)	152	(59.6)	110	(43.1)
Unknown	60	(23.5)	50	(19.6)	31	(12.2)
Yes	17	(6.7)	27	(10.6)	89	(34.9)
No	27	(10.6)	26	(10.2)	25	(9.8)

Phase III: New Combat Medics (n=127)

Tables 10-13 summarize the responses concerning new medics' perceptions of their computer proficiency. Overall, at least half of all new medics rated themselves as needing minimal or no assistance in performing three of the given computer skills: 56.7% in using E-mail (Table 10); 61.4% in word processing (Table 11); and 63.0% in using Internet (Table12). However, only 14.1% of all new medics rated themselves as able to operate hospital automated systems with minimal or no assistance (Table 13). Also, overall, more than a third of new medics felt they needed more than minimal assistance: 43.3%, E-mail;, 38.6%, word processing; 36.9%, Internet; and 85.9%, hospital automated systems. There was a lot of variation in responses by study location, epecially for proficiency in using E-mail: the percentage of new medics rating themselves as needing minimal or no assistance ranged from 38.4% at Fort Bragg to 81.8% at Fort Lewis. More than 75% of new medics at all locations rated themselves as needing more than minimal assistance in operating hospital automated systems: from 75.1% at Fort Carson to 95.5% at Fort Lewis.

Table10. Self-rated proficiency of new combat medics in using E-mail to send/receive messages (Q6a).

Response	Fort Bragg No.	(%)	Fort Carson No.	(%)	Fort Hood No.	(%)	Fort Lewis No.	(%)	Total No.	(%)
Unable to perform	12	(46.2)	4	(25.0)	12	(19.1)	1	(4.6)	29	(22.8)
Perform w/continuous assistance	0	(0.0)	0	(0.0)	6	(9.5)	3	(13.6)	9	(7.1)
Perform w/moderate assistance	4	(15.4)	5	(31.3)	8	(12.7)	0	(0.0)	17	(13.4)
Perform w/minimal assistance	3	(11.5)	1	(6.3)	15	(23.8)	7	(31.8)	26	(20.5)
Proficient, no assistance needed	7	(26.9)	6	(37.5)	22	(34.9)	11	(50.0)	46	(36.2)

Table11. Self-rated proficiency of new combat medics in using word processing programs such as Word or WordPerfect. (Q6b)

Response	Fort Bragg No.	Fort Bragg (%)	Fort Carson No.	Fort Carson (%)	Fort Hood No.	Fort Hood (%)	Fort Lewis No.	Fort Lewis (%)	Total No.	Total (%)
Unable to perform	8	(30.8)	2	(12.5)	12	(19.1)	1	(4.6)	23	(18.1)
Perform w/continuous assistance	2	(7.7)	1	(6.3)	4	(6.4)	2	(9.1)	9	(7.1)
Perform w/moderate assistance	4	(15.4)	5	(31.3)	6	(9.5)	2	(9.1)	17	(13.4)
Perform w/minimal assistance	6	(23.1)	5	(31.3)	9	(14.3)	6	(27.3)	26	(20.5)
Proficient, no assistance needed	6	(23.1)	3	(18.8)	32	(50.8)	11	(50.0)	52	(40.9)

Table 12. Self-rated proficiency of new combat medics in surfing the Internet. (Q6c)

Response	Fort Bragg No.	Fort Bragg (%)	Fort Carson No.	Fort Carson (%)	Fort Hood No.	Fort Hood (%)	Fort Lewis No.	Fort Lewis (%)	Total No.	Total (%)
Unable to perform	9	34.6	2	12.5	7	11.1	2	9.1	20	(15.7)
Perform w/continuous assistance	2	7.7	0	0.0	4	6.4	1	4.6	7	(5.5)
Perform w/moderate assistance	2	7.7	5	31.3	11	17.5	2	9.1	20	(15.7)
Perform w/minimal assistance	3	11.5	3	18.8	14	22.2	3	13.6	23	(18.1)
Proficient, no assistance needed	10	38.5	6	37.5	27	42.9	14	63.6	57	(44.9)

Table 13. Self-rated proficiency of new combat medics in operating hospital automated systems such as CHCS (Composite Health Care System). (Q6d)

Response	Fort Bragg No.	Fort Bragg (%)	Fort Carson No.	Fort Carson (%)	Fort Hood No.	Fort Hood (%)	Fort Lewis No.	Fort Lewis (%)	Total No.	Total (%)
Unable to perform	16	61.5	9	56.3	35	55.6	14	63.6	74	(58.3)
Perform w/continuous assistance	5	19.2	1	6.3	9	14.3	1	4.6	16	(12.6)
Perform w/moderate assistance	2	7.7	2	12.5	9	14.3	6	27.3	19	(15.0)
Perform w/minimal assistance	2	7.7	2	12.5	7	11.1	1	4.6	12	(9.4)
Proficient, no assistance needed	1	3.9	2	12.5	3	4.8	0	0.0	6	(4.7)

Table 14 summarizes the numbers and types of computer systems new combat medics reported as available for them to use in their unit. Note that the computer counts are for the total number of 386s, 486s, and pentium models that are available in a medic's unit. Information on the number of computers with LAN/Modem, Internet access, or CD-ROMs was not requested in the survey. About 21% of all surveys had no reponse for the number of computers available, which may have been from confusion on whether the count was for all computers or only for those with features such as "With Internet."

Overall, for each of the three computer models, more than 60% of new combat medics reported that no computers were available in their unit for their use. Other responses ranged from 1 to 20 computers, but only a few medics (less than 3%) reported having more than three available to them in the unit. Overall, no more than 11% of new combat medics reported having any computer model with LAN/modem, Internet access, or CD-Rom features. By study location, the highest percentage of medics reporting a feature was at Fort Bragg, where 15.4% reported having the CD-ROM feature.

Table 14. Distribution of new combat medics' responses to question on computer systems available for them to use in their unit (Q48).

Computer Description	Fort Bragg No.	Fort Bragg (%)	Fort Carson No.	Fort Carson (%)	Fort Hood No.	Fort Hood (%)	Fort Lewis No.	Fort Lewis (%)	Total No.	Total (%)
	Number of Medics Responding by Study Location									
386 Computers (Q48a)										
Number of computers										
Missing	0	(0.0)	0	(0.0)	28	(44.4)	0	(0.0)	28	(22.0)
0	22	(84.6)	15	(93.8)	26	(41.2)	19	(86.4)	82	(64.6)
1	2	(7.7)	1	(6.3)	5	(7.9)	1	(4.6)	9	(7.1)
2	2	(7.7)	0	(0.0)	2	(3.2)	1	(4.6)	5	(3.9)
4	0	(0.0)	0	(0.0)	0	(0.0)	1	(4.6)	1	(0.8)
9	0	(0.0)	0	(0.0)	1	(1.6)	0	(0.0)	1	(0.8)
20	0	(0.0)	0	(0.0)	1	(1.6)	0	(0.0)	1	(0.8)
With LAN/Modem										
Unknown	11	(42.3)	6	(37.5)	16	(25.4)	6	(27.3)	39	(30.7)
Yes	1	(3.9)	1	(6.3)	2	(3.2)	1	(4.6)	5	(3.9)
No	14	(53.9)	9	(56.3)	45	(71.4)	15	(68.2)	83	(65.4)
With Internet										
Unknown	12	(46.2)	6	(37.5)	18	(28.6)	6	(27.3)	42	(33.1)
Yes	0	(0.0)	1	(6.3)	3	(4.8)	2	(9.1)	6	(4.7)
No	14	(53.9)	9	(56.3)	42	(66.7)	14	(63.6)	79	(62.2)
With CD-ROM										
Unknown	12	(46.2)	6	(37.5)	14	(22.2)	7	(31.8)	39	(30.7)
Yes	0	(0.0)	1	(6.3)	6	(9.5)	2	(9.1)	9	(7.1)
No	14	(53.9)	9	(56.3)	43	(68.30	13	(59.1)	79	(62.2)
486 Computers (Q48b)										
Number of computers										
Missing	0	(0.0)	0	(0.0)	26	(41.3)	0	(0.0)	26	(20.5)
0	23	(88.5)	15	(93.8)	30	(47.6)	21	(95.5)	89	(70.1)
1	0	(0.0)	1	(6.3)	3	(4.8)	1	(4.6)	5	(3.9)
2	3	(11.5)	0	(0.0)	2	(3.2)	0	(0.0)	5	(3.9)
6	0	(0.0)	0	(0.0)	1	(1.6)	0	(0.0)	1	(0.8)
20	0	(0.0)	0	(0.0)	1	(1.6)	0	(0.0)	1	(0.8)
With LAN/Modem										
Unknown	11	(42.3)	6	(37.5)	16	(25.4)	6	(27.3)	39	(30.7)
Yes	0	(0.0)	1	(6.3)	3	(4.8)	0	(0.0)	4	(3.1)
No	15	(57.7)	9	(56.3)	44	(69.8)	16	(72.7)	84	(66.1)
With Internet										
Unknown	11	(42.3)	6	(37.5)	19	(30.2)	8	(36.6)	44	(34.6)
Yes	0	(0.0)	1	(6.3)	4	(6.4)	0	(0.0)	5	(3.9)
No	15	(57.7)	9	(56.3)	40	(63.5)	14	(63.6)	78	(61.4)
With CD-ROM										
Unknown	11	(42.3)	7	(43.8)	17	(27.0)	9	(40.9)	44	(34.6)
Yes	0	(0.0)	0	(0.0)	4	(6.4)	0	(0.0)	4	(3.1)
No	15	(57.7)	9	(56.3)	42	(66.7)	13	(59.1)	79	(62.2)
Pentiums (Q48c)										
Number of computers										
Missing	0	(0.0)	0	(0.0)	29	(46.0)	0	(0.0)	29	(22.8)
0	20	(76.9)	14	(87.5)	25	(39.7)	19	(86.4)	78	(61.4)
1	1	(3.9)	0	(0.0)	4	(6.4)	2	(9.1)	7	(5.5)
2	3	(11.5)	1	(6.3)	2	(3.2)	0	(0.0)	6	(4.7)
3	1	(3.9)	1	(6.3)	2	(3.2)	1	(4.6)	5	(3.9)
4	1	(3.9)	0	(0.0)	0	(0.0)	0	(0.0)	1	(0.8)
6	0	(0.0)	0	(0.0)	1	(1.6)	0	(0.0)	1	(0.8)

Table 14. Distribution of new combat medics' responses to question on computer systems available for them to use in their unit (Q48) (continued).

Computer Description	Number of Medics Responding by Study Location								Total	
	Fort Bragg		Fort Carson		Fort Hood		Fort Lewis			
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Pentiums (Q48c)										
With LAN/Modem										
Unknown	10	(38.5)	6	(37.5)	13	(20.6)	7	(31.8)	36	(28.3)
Yes	2	(7.7)	1	(6.3)	3	(4.7)	3	(13.6)	9	(7.1)
No	14	(53.9)	9	(56.3)	47	(74.6)	12	(54.6)	82	(64.6)
With Internet										
Unknown	10	(38.5)	5	(31.3)	17	(27.0)	7	(31.8)	39	(30.7)
Yes	3	(11.5)	2	(12.5)	3	(4.8)	3	(13.6)	11	(8.7)
No	13	(50.0)	9	(56.3)	43	(68.3)	12	(54.6)	77	(60.6)
With CD-ROM										
Unknown	9	(34.6)	6	(37.5)	14	(22.2)	8	(36.4)	37	(29.1)
Yes	4	(15.4)	1	(6.3)	6	(9.5)	3	(13.6)	14	(11.0)
No	13	(50.0)	9	(56.3)	43	(68.3)	11	(50.0)	76	(59.8)

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