

Center for Quality and Productivity Improvement University of Wisconsin-Madison



SURVEY



UWHC – Smart IV Pumps

Before the implementation...

Letter to UWHC employees

Dear UWHC employee,

A group of UW-Madison researchers are working on a study of the impact of the introduction of the smart IV pump technology on work organization and quality of working life. This survey is part of the effort to evaluate the technology before and after its implementation. We are collecting questionnaire data before the implementation of the smart IV pump technology and after the implementation of the technology and a period of its use. You will receive this survey before the Smart pumps are implemented, one month after implementation and one year following implementation. Your response for each survey round is appreciated.

Participation in the study is voluntary, and there is no requirement for you to be a participant. If you do agree to be in the study, you are asked to fill out the attached questionnaire, which will tell us about your job, your quality of working life, your perceptions of the technology and your performance. The questionnaire will only take about 15 minutes to fill out. When completing the questionnaire, you can leave blank any questions that you do not want to answer. **No one at your work place will ever see your answers.** Your responses are strictly confidential and will be closely guarded. My students and I will be the only people to ever see your answers. All reports from this study will use responses from all of the participants so that no one person can be identified. My research staff and I will be the only people to ever see your answers. No answers of individuals or small groups of individuals will ever be released.

It is our hope that through the information we obtain from this study, we can better understand how the smart IV pump technology affects employees. Thank you for your consideration.

Sincerely.

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Instructions

When completing the questionnaire, you can leave blank any questions that you do not want to answer. Remember that your responses are strictly confidential and will be closely guarded. This questionnaire has been designed to gather information about the work you do, the technology you use, and your quality of working life. Please try to answer all of the questions.

To answer the questions, circle the appropriate response on the scale. For example:

How satisfied are you with the computer you use? Not Satisfied \longleftrightarrow Very Satisfied 1 2 3 4 5 6 7

Some questions will require answers similar to the scales above, while other questions will require different responses. Please try to be as accurate as possible.

We appreciate the time you are taking to complete this questionnaire and hope that the information will help us better understand how new technology influences people.

In order to be able to keep track of your answers to the questionnaire over time, we ask that you provide us with an identifier. Please write down below the last four digits of your Social Security Number:	
(last four digits of your SS number)	

Section A. Abou	t yo	ur job																
1. Please, check	k you	ır current jo	ob positio	n:	□₁St	aff R	N		Tra	velle	er/A	gen	cy RN	\square_3 C	CRNA	$\square_4 MD$	□₅Othe	r
2. How long ha	ive y	ou worked	for your	pre	sent e	emple	oye	r?			_ye	ars		m	onths			
3. How long ha	ive y	ou worked	in your c	urre	ent jo	b (po	ositi	on)?				yea	rs		_ months	s		
4. What unit do □₁ B4/6 □₂ B6 □₁₀ D6/4 □₁₁ D0 □₁ଃ F4P4, F4/4 & 1 □₂₄ Radiology	/4 6E4	□ ₃ B6/5 □ ₁₂ D6/5	□ ₄ B6/6 □ ₁₃ D6/6 □ ₂₀ F6/5 atory Prod	5	□ ₁₄	06C6 6/6		6S3 ☐ □15 F □22 F □26 C	4/5 Emer	& Fo	5C5 y D	ept	□ ₇ D4/4 □ ₁₆ F4/6 □ ₂₃ PAC □ ₂₇ Othe	S CU / O	□ ₁₇ F4N perating			
5. What is the shi	ift th	at you typic	cally wor	k?		Day	,		pm	l	\square_3	Nig	ht					
Section B. Abou	t yo	ur percepti	ons of th	ie s	mart	IV p	oun	ip te	chno	olog	y							
1. What do you th	hink	about the <u>i</u>	<u>nformati</u>	<u>on</u> y	you r	eceiv	ed :	about	the	sma	art I	V pı	ımp techr	ology	y impler	nentation	ι?	
	a	. Sufficie	nt	1	2	3		4	5	6		7	Insufficio	ent				
	b	. Comple	te	1	2	3		4	5	6		7	Incomple	ete				
	c	. Timely		1	2	3		4	5	6		7	Non-time	ely				
	d			1		3		4	5	6		7	Vague					
	e			1	2				5	6		7	Useless					
2. What do you th	nink	about your					_				eme	enta	<i>tion</i> of the	e sma	rt IV pu	mp techn	ology?	
	a.	Timely	1		2	3	4			6	7		on-timely					
	b.	Sufficient			2		4			6	7		nsufficien	t				
	c.	Useful	1			3	4	5 5		6	7		seless					
	d.	Meaningfu Good	ul 1 1		2	3	4	5		6	7 7		leaningle:	SS				
	e. f.	Productive			2	3	4	5		6	7		ad/poor [on-produ	ctive				
	1.	Troductive	C									- 1	on produ	cuve				
Using the smart I	V pı	ımp						<u>-</u>	Strongly	agree						Strongly disagree		
3 will enable	me t	o accompli	sh tasks i	mor	e qui	ckly.			1	2		3	4	5	6	7		
4 will improv	e the	e quality of	care I pr	ovio	le.				1	2		3	4	5	6	7		
5 will improv	e the	e safety of c	care I pro	vid	e.				1	2		3	4	5	6	7		
6 will enhanc	e my	effectiven	ess on th	e jo	b.				1	2		3	4	5	6	7		
7 will make it	t eas	ier to do my	y job.						1	2		3	4	5	6	7		
8 will increas	e the	e safety of c	are prov	ided	l to o	ur pa	tier	ıts.	1	2		3	4	5	6	7		
9. Because of the feel they receive			technolo	ogy,	patie	ents v	will		1	2		3	4	5	6	7		

10. Please circle the number that best reflects your *acceptance* of the smart IV pump technology: Dislike very much Like very much and and don't want to eager to use. 11. What do you anticipate your reactions to the interface of the smart IV pump to be? Difficult Easy a. Satisfying **Frustrating** Rigid Flexible 12. Learning to operate the smart IV pump. Difficult Easy 13. Exploring new features by trial and error. Difficult Easy Difficult Easy 14. Remembering names and use of commands. 15. Tasks can be performed in a Never Always straightforward manner. 16. Alarm messages for pump functioning. Frustrating Acceptable 17. Alert messages for the drug library. **Frustrating** Acceptable 18. Supplemental training materials. Confusing Clear 19. Speed of programming smart IV pump. Too slow Fast enough 20. Reliability of smart IV pump. Unreliable Reliable Quiet 21. Smart IV pump will be... Noisy Difficult 22. Correcting your mistakes. Easy 23. Designed for all levels of users. Never Always 24. Smart IV pump will function as I expect. Never Always Occasionally Section C. About the characteristics of your work environment... Fairly often Sometimes Very often Rarely 1. How often are you clear on what your job responsibilities are? 2. How often can you predict what others will expect of you on the job? 3. How much of the time are your work objectives well-defined? 4. How often are you clear about what others expect of you on the job? 5. How often does your job require you to work very fast? 6. How often does your job require you to work very hard? 7. How often does your job leave you with little time to get things done?

8. How often is there a great deal to be done?

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
9. I often have to deal with new problems on my job.	1	2	3	4	5	6	7
10. On my job, I often have to handle surprising or unpredictable situations.	1	2	3	4	5	6	7
11. To be successful on my job requires all my skill and ability.	1	2	3	4	5	6	7
12. On my job, I seldom get a chance to use my special skills and abilities.	1	2	3	4	5	6	7
13. My job is very challenging.	1	2	3	4	5	6	7
How much influence do you have		Very little		A little	Moderate amount	Much	Very much
14 over the variety of tasks you perform?		1		2	3	4	5
15 over the availability of supplies and equipment you need to do your	work?	1		2	3	4	5
16 over the order in which you perform tasks at work?		1		2	3	4	5
17 over the amount of work you do?		1		2	3	4	5
18 over the pace of your work, that is how fast or slow you work?		1		2	3	4	5
19 over the quality of the work that you do?		1		2	3	4	5
20 over the decisions concerning which individuals in your work area d which tasks?	0	1		2	3	4	5
21 over the hours or schedule that you work?		1		2	3	4	5
22 over the decisions as to when things will be done in your work area?	,	1		2	3	4	5
23 over the policies, procedures, and performance in your work area?		1		2	3	4	5
24 over the availability of materials you need to do your work?		1		2	3	4	5
25 over the training of other workers in your work area?		1		2	3	4	5
26. To what extent can you do your work ahead and take a short rest break work hours?	during	1		2	3	4	5
27. In general, how much influence do you have over work and work-relate factors?	ed	1		2	3	4	5

28. How much challenge is there on your job? (circle one number)

There is very little challenge on my job; I don't get a chance to use any special skills and abilities and I never have jobs which require all my abilities to		There is a g on my job my special s often have	; I get a kills a	o use s and re all plete					
complete them successfully. 1 2	3	4	5	6		successfully			
29. How much uncertainty is	s there in your	job? (circle one r	number)						
Very little; I almost know what to expect and am never surprised by comething happening inexpectedly on my job.		Moderate uncertainty		A great de sure what is unexpe	going	to happen ngs frequ	, and		
1 2	3	4	5	6		114	7		
Section D. About your qua	lity of workin	ng life		_	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
. I am not willing to put my	self out just to	help the hospital	l .		1	2	3	4	5
2. In my work I like to feel I he hospital as well.	am making so	ome effort, not jus	st for myself	but for	1	2	3	4	5
3. To know that my own wo would please me.	rk had made a	contribution to th	ne good of th	e hospital	1	2	3	4	5
					Never	Rarely	Occasionally	Often	Always
I. At the end of the workday	, I am comple	tely exhausted, m	entally and	physically.	1	2	3	4	5
5. There is a great amount of	f nervous strai	n connected with	my daily wo	ork activities.	1	2	3	4	5
6. My daily work activities a	are extremely t	trying and stressfu	ıl.		1	2	3	4	5
7. In general, I am unusually	tense and ner	vous on the job.			1	2	3	4	5
8. All in all, how satisfied w	ould you say y	you are with your	job?	\square_2 Sor \square_3 No	mewhat too s	ch satisfi at satisfied satisfied	ed		
9. If you were free to go into choice be?	any type of jo	ob you wanted, w	hat would yo	\square_1 I wo \square_2 I wo	ould w	ant to re	ob I have n tire and no ne other job	t work at	

10. Knowing what you know now, if you had to decide all over again whether to take the job you now have, what would you decide?	uin \square_1 I would decide without hesitation to take the s \square_2 I would have some second thoughts. \square_3 I would decide definitely not to take the same				
11. In general how well would you say that your job measures up to the sort of job you wanted when you took it	\square_1 Very much like the job I wanted. \square_2 Somewhat like the job I wanted. \square_3 Not very much like the job I wanted.				
12. If a good friend of yours told you he or she was interested in working in a job like yours for your employer, what would you tell him or her?	\square_1 I would strongly recommend it. \square_2 I would have doubts about recommending it \square_3 I would advise the friend against it.	it.			
13. Using your own definition of "burnout", please circle one of the numbers	to the right:				
 a. I enjoy my work. I have no symptoms of burnout. b. Occasionally I am under stress, and I don't always have as much energy as c. I am definitely burning out and have one or more symptoms of burnout, su exhaustion. d. The symptoms of burnout that I'm experiencing won't go away. I think abe. I feel completely burned out and often wonder if I can go on. I am at the pomay need to seek some sort of help. 	ch as physical and emotional out frustrations at work a lot.	1 2 3 4 5			

The following 4 questions are designed to help determine your moods, since the way you feel is a part of your quality of working life. The list of words below describes feelings people have. Please read each item and circle one number for each word, which describes how you have been feeling <u>during the past week</u>, <u>including today</u>.

	Not at all	A little		Moderately		Quite a bit	Ext	remely
14. Fatigued	1	2		3		4		5
15. Exhausted	1	2		3		4		5
16. Nervous	1	2		3		4		5
17. Tense	1	2		3		4		5
		Never	A few times a year or less, almost never	Once a month or less, rarely	A few times a month, some- times	Once a week, rather often	A few times a week, nearly all the time	Every day
18. I feel emotionally dra	ined from my work.	1	2	3	4	5	6	7
19. I feel used up at the e	nd of the workday.	1	2	3	4	5	6	7
20. I feel fatigued when I and have to face another		1	2	3	4	5	6	7
21. Working all day is rea	ally a strain for me.	1	2	3	4	5	6	7
22. I feel burned out from my work.		1	2	3	4	5	6	7
23. I feel frustrated by my job.		1	2	3	4	5	6	7

Section E. About your perceptions of your performance...

Please rate the following aspects of your performance at work during the past 3 months.	Never	Occasionally	Often	Always				
1. You accomplished what you wanted.	1	2	3	4				
2. You accomplished as much as you could.	1	2	3	4				
3. You felt your performance was good.	1	2	3	4				
4. You found it difficult to concentrate on the task at hand.	1	2	3	4				
5. You felt your productivity was lower than expected.	1	2	3	4				
6. You lost interest or became bored at work.	1	2	3	4				
7. You worked more slowly than expected.	1	2	3	4				
Please indicate to what extent you agree or disagree with the following statements.	Strongly disagree	Disagree	Neither agree, nor disagree	Agree	Strongly			
8. In general, I am satisfied with the quality of care that I provide.	1	2	3	4	5			
9. I have enough time to complete patient care tasks safely.	1	2	3	4	5			
10. I usually have plenty to do; but I can always follow rules and procedures related to patient safety and standards of care.	1	2	3	4	5			
Section F. About you								
1. What is your gender? \square_1 Male \square_2 Female								
2. What is your education level?								
\square_1 Some college or technical training beyond high school (1-3 years) \square_2 Graduated from college (BA, BS) \square_4 Graduate degree (Masters, Ph.D., M.D.,)								
3. How old are you? \square_1 less than 34 \square_2 35-44	□ ₃ 45-54	$\square_4 5$	55+					

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