General Surgery Resident Work-Life-Education Satisfaction Survey

There are 29 questions in this survey. The majority of the questions are multiple-choice and intended for you to honestly express your satisfaction with the current model of call instituted at your training institution. The survey should take no more than 5 minutes, and your consent to participate is implied by your completion of this survey. All responses are anonymous and will be reported in aggregate form only.

1. Please indicate your PGY level of training: **PGY 1/PGY2/PGY3/PGY4/PGY5/PGY6**

2. I will likely pursue fellowship training after completion of my residency in general surgery: **Y/N/Not Sure**

3. Hours worked in the last 7 days including call: **(hrs)**

4. Length of longest shift in last 7 days (including in-house call): **(hrs)**

5. Hours slept last night: **(hrs)**

6. Total hours slept in last 7 days: **(hrs)**

7. If I were to set a work hour limit, it would be: **(hrs/wk)**

For Questions 8- 26, residents please a choice that best reflects your level of agreement with the statement: Strongly agree/Agree/Neutral/Disagree/Strongly disagree. After each question you will have the opportunity to leave a comment.

8.With the current work hour schedule, I am sleep-deprived on a regular basis.

9. I feel overworked.

10. I feel pressured to work more.

11. If I could extend my residency in order to work fewer hours, I would.

12. If tighter work hour restrictions were imposed, I wouldn't have time to master the procedures of my specialty during residency.

13. With the current hours I work, my residency training will adequately prepare me for practice.

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14. With the current work hour schedule, I am able to maintain a healthy sleep schedule.

15. With the current work hour schedule I am able to learn more effectively.

16. The current work hour schedule allows me to master new procedures effectively.

17. With the current work hour schedule, I am able to know my patients well.

18. With the current work hour schedule, I am able to diagnose and manage patients effectively.

19. With the current work hour schedule, I feel fully integrated on the service.

20. The current work hour schedule ensures patient safety, as continuity of care is maintained.

21. The current work hour model promotes fewer medical errors.

22. My exposure to attending staff is adequate with the current work hour call model.

23. The overall morale of Residents is good in the current work hour call model.

24. I have adequate free time to spend with friends and family.

25. A return to the previous 24-hour call model would have a positive impact on my quality of life. (Quebec) – I feel that eliminating 24-hour continuous duty and limiting the duty hours to 72 hours weekly would have a positive impact on my quality of life (Rest of Canada)

26. The current call work schedule promotes fragmented care.

For Questions 27-29, Residents were asked to provide their input about the topic asked in a comment box.

27. How do you feel work hour restrictions has impacted your surgical education?

28. If you could improve on the current restricted work hour model, how would you reorganize call and shift requirements to improve on surgical education delivery?

29. With the current work hour restrictions, how do you feel patient safety is affected?

Appendix 1 to Hamadani F, Deckelbaum D, Shaheen M, et al. Elimination of 24-hour continuous medical resident duty in Quebec. *Can J Surg* 2015.

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Table S1. Perception of quality of care delivered to patients and exposure to attending staff		
Theme and Statement	Quebec General Surgery residents	National General Surgery residents
Perception of quality of patient care (AGREE)	/61 respondents agree	/122 respondents agree
I am able to know my patients well, n (%)	8 (13.1%)	98 (80.3%)
I am able to diagnose and manage patients more effectively, n (%)	7 (11.9%)	95 (77.9%)
The current* work hour schedule improves patient safety, n (%)	8 (13.1%)	73 (59.8%)
Exposure to attending staff (AGREE)		
My exposure to attending staff is adequate with the current call model	5 (7.6%)	83 (68.0%)
*For Quebec residents the word "current" denotes the restricted duty hour model (12 h shifts at McGill and night float at the other Quebec programs) and for national programs it is the 24-hour model		

Table S2. Self-assessment of sleep quantity and self-perception of overall morale with current duty-hour model			
Theme and Statement	Quebec General Surgery residents	National General Surgery residents	Statistical Analysis (t test)
Sleep Assessment and duty hours worked	/61 respondents agree	/122 respondents agree	p-value
Hours slept per night, mean (SD)	5.5 (1.3)	6.5 (1.9)	0.0033
Hours slept in the last week, mean (SD)	44 (11.6)	41.6 (7.4)	0.0912
Average of longest shift last week, mean (SD)	12.6 (2.2)	25.8 (12.6)	0.0001
Average hours worked last week, mean (SD)	71.8 (16.7)	75.9 (22.3)	0.2063
With the current duty hour model I feel sleep-deprived, n AGREE (%)	55 (89.6%)	65 (53.2%)	—
Overall morale and duty hours (AGREE)			
I feel overworked, n (%)	35 (57.9%)	48 (39.3%)	—
I feel pressured to work more	38 (62.5%)	44 (36.1%)	—
The overall morale of Residents in my program is good, n (%)	12 (19.6%)	63 (51.6%)	—
I have adequate free time to spend with friends and family, n (%)	18 (29.5%)	27 (22.1%)	—
The current duty hour model has a positive impact on the quality of my work-life balance, n (%)	13 (21.4%)	84 (68.8%)	—
If I could extend my Residency and work less hours per week I would, n (%)	9 (14.4%)	30 (24.5%)	—

Appendix 1 to Hamadani F, Deckelbaum D, Shaheen M, et al. Elimination of 24-hour continuous medical resident duty in Quebec. *Can J Surg* 2015.

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Table S3. Perception of the impact of duty hour restriction on the quality of surgical education and competency		
Theme and Statement	Quebec General Surgery residents	National General Surgery residents
Quality of education, service integration, and future competency (AGREE)	/61 respondents agree	/122 respondents agree
I am able to master the necessary surgical skills, n (%)	10 (16.3%)	73 (59.8%)
With the current duty hour model I am able to learn effectively	10 (17.2%)	36 (29.5%)
I feel fully integrated on the service, n (%)	15 (24.5%)	104 (85.2%)
The current duty hour model promotes fragmented care, n (%)	56 (92.3%)	13 (10.6%)
My residency will adequately prepare me for practice	14 (23.5%)	83 (68.0%)

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Table S4. Sub-group analysis of some of the variables measured by University in Quebec					
Sleep Measures					*p* value
Statement/Measure	McGill (n = 34)	U de M (n = 17)	Sherbrooke (n = 7)	Laval (n = 3)	ANOVA
Hours slept before restrictions	6.7 + / – 1.4 hours	6.7 +/– 1.4 hours	7.2 +/– 2.1 hours	6.2 +/– 1.7	0.492
Hours slept after restrictions	5.7 + / – 1.3 hours	5.7 +/– 1.3 hours	5.5 +/– 1.6 hours	6.3 +/– 2.3	0.724
Weekly hours worked before restrictions	71.6 + / – 13.2 hours	71.6 +/– 13.2 hours	72.7 +/– 12.7 hours	71.4 +/– 7.9	0.989
Weekly hours worked after restrictions	72.4 + / – 9.8 hours	72.4 +/– 9.8 hours	73.4 +/– 11.9 hours	70.2 +/– 12.3	0.925
Delivery of Safe Patient Care (Disagree)					
I am able to know my patients well, n (%)	33 (97.0%)	11 (64.7%)	7 (100%)	2 (66.6%)	—
With the current duty model patient safety is improved, n (%)	29 (85.2%)	16 (94.1%)	5 (71.4%)	3 (100%)	—
Quality of education and future competency (Disagree)					
I am able to master the necessary surgical skills, n (%)	28 (82.3%)	15 (88.2%)	5 (71.4%)	3 (100%)	—
My residency will adequately prepare me for practice	25 (73.5%)	12 (70.5%)	7 (100%)	3 (100%)	—