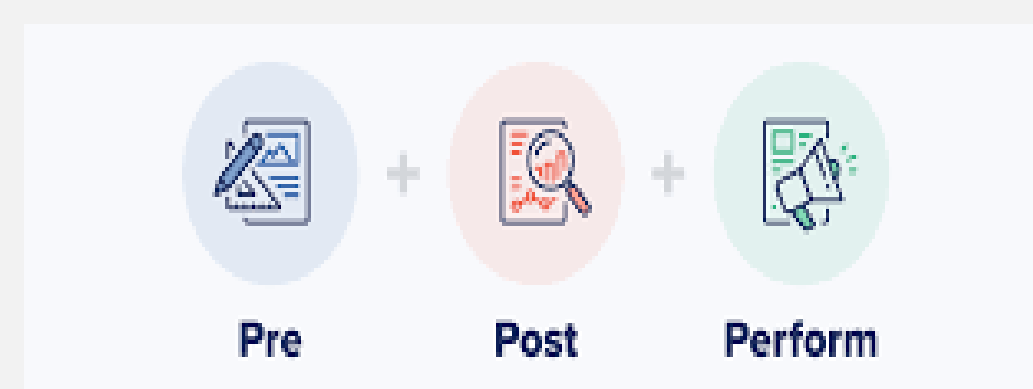


## INTRODUCTION

- Consultations by General Internal Medicine (GIM) physicians in the emergency department (ED) are essential for ensuring safe, effective patient care and determining the need for hospitalization.<sup>1</sup>
- GIM physicians frequently manage patients in hospital wards while also responding to ED consultation requests, leading to delays in consultations and challenges in balancing workload between the ward and the ED. This situation can contribute to physician burnout.<sup>2</sup>
- To streamline physician workload, a quality improvement (QI) initiative trialed a specialized GIM ED consultation service, separating clinical duties between the ward and the ED.

➤ **This study's purpose was to evaluate the impact of this QI intervention on participating physicians' wellness.**

## METHODS



- Using a pre-/post- research design, two questionnaires were adapted from the validated Mini Z 2.0 (Zero Burnout Program) Institute for Professional Worklife measure for clinicians.<sup>3</sup>
- Surveys distributed via Google Forms to participating GIM physicians (n = 18, pre-intervention, and n = 21, post-intervention) from the Grey Nuns Community Hospital (GNCH) in Edmonton, Alberta, Canada.

➤ **Intervention:** A Nurse Practitioner (NP) from 0700-1500 hours from Mon-Fri to assist the GIM physician with consultations and admissions from the ED.

- GIM physician responsibility was ED-to-ward consultations limiting on ward inpatient service distraction. Admitted patients in the ED were under care of the GIM ward physician.

- Data analyzed using descriptive statistics and the Mini Z outcome measurement scale.

## RESULTS

**Table 1. Comparison of pre- and post- initiative survey question response and Mini Z 2.0 outcomes.**

Survey Question	Pre-results (n = 13/18)	Post-results (n=13/21)	Change
1. Overall, I am satisfied with my current job.	33%	33%	36% ↑ in job satisfaction
2. Using your own definition of "burnout", please choose one of the numbers below:	31% burnout 47% start to burnout 23% under stress	8% burnout, 38% start to burnout 46% under stress	23% ↓ in burnout 9% ↓ of start to burnout 23% ↑ of under stress
3. My professional values are well-aligned with those of my clinical leaders.	39%	31%	8% ↓ in alignment of professional values with clinical leaders
4. The degree to which my department works together is good/optimal.	84%	85%	No change in teamwork within department
5. My control over my workload is satisfactory/good.	70%	62%	8% ↓ in control over workload
6. Overall, I feel a great deal of stress because of my job.	54%	77%	24% ↑ in job-related stress
7. Sufficiency of time for documentation: good/satisfactory.	61%	39%	23% ↓ in time for documentation
8. The amount of time I spent on the EMR at home is: little/minimal.	23%	30%	7% ↑ in time spent on EMR at home
9. EMR adds to the frustration of my day: agree/strongly agree.	8%	15%	7% ↑ in EMR frustration
10. Which best describes the atmosphere at the hospital:	8% hectic/chaos 31% below avg 46% above avg 15% avg	31% hectic/chaos 8% below avg 23% above avg 30% avg, 8% calm	23% ↑ in hectic/chaos 61% avg No change in above avg and calm
11. What is the likelihood that you will cut down on or pull out of CTU ward service in the next 2 years?	69% likely or very likely	46% likely or very likely	20% ↓ in likelihood of decreasing weeks of service in next 2 years
12. Work rarely encroaches on my personal time.	83% disagree	100% disagree	27% ↑ in work encroaching on personal time
13. My work schedule leaves me enough time for my family.	8% agree	15% agree	7% ↑ in time available for family
14. The amount of call I am required to take is not excessive.	69% agree	76% agree	7% ↑ in amount of call not excessive
15. The interruption of my personal life by work is a problem.	70% agree	91% agree	21% ↑ in personal life interrupted due to work
16. Did the pilot of the ED triage service help with workflow when you were on CTU?	N/A	38% yes 61% no 61% skipped	38% ED consult service helped with workflow
17. Did the ED triage pilot help you finish work earlier than when you were on CTU?	N/A	31% yes 7% no 61% skipped	31% ED consult service helped finish work earlier on CTU, 7% did not
18. Did you complete both surveys?	N/A	77% yes, 23% no	Majority completed both
OVERALL SCORE (>20 = positive work environment) (Σ Q1-Q10)	31	31	No difference in positive working environment
SATISFACTION SCALE (>20 = highly supportive environment) (Σ Q1-Q4)	12	14	2% ↑ in satisfaction of a supportive environment
STRESS SCALE (>20 = low stress environment) (Σ Q5-Q8)	12	11	1% ↓ in stress with EMR pressures

## DISCUSSION

- No significant change in the working environment or physician well-being pre- and post- initiative.



- Decrease in perceived burnout/stress levels
- Perceived improvement in CTU workflow.

- Post-intervention challenges: decreased documentation time, reduced control over workload, and increased job stress were noted.
- Factors contributing to these challenges included time pressure related to consults, learning a new EMR, changes in hospital leadership, and variability in workload.
- Studies have associated physician wellness with factors such as workload control, work-life integration, professional fulfillment, EMR efficiency, and organizational values alignment.<sup>4,5</sup>
- Despite extensive QI research on workflow and schedule changes, few studies explore the impact on physician well-being.<sup>6</sup>
- Limitations: a small sample size, varied response rates pre- and post- intervention, and lack of post-intervention interviews.

## CONCLUSION

- Prioritize the wellness of physicians and other healthcare providers when implementing QI initiatives.
- Integrating proactive wellness strategies may improve intervention implementation sustainability.



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