



ADAPT

**It's our responsibility
to make a just culture.**



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Adapt

Executive Summary

Develop a healthy, conscious and evolving approach to fatigue management as one component of resident wellbeing.

There are concerns that this change will require additional time and resources to implement. While all change requires some investment, this approach centers primarily on a change in thinking and some new behaviours. This toolkit is designed to help residents, programs and leaders get started today, and shares effective, simple strategies that can be easily implemented now. The risk of doing nothing is greater, and the status quo is not acceptable.

We call on all those with a role in medical education to **ACKNOWLEDGE, ACT, and ADAPT** to manage the risk of fatigue for postgraduate medical education.

– FRM Task Force 2018



Acknowledge. Act. Adapt

Make a culture in which Fatigue Risk Management is the norm.

Auditing the FRM System: Continuous Quality Improvement & Evaluation



Auditing the FRM strategy over time is a vital component of overall fatigue risk management, and should aim to facilitate continuous improvement of the local FRM practices and procedures.

Internal Audit & Feedback

Maintaining a clear, up-to-date record of FRM implementation procedures, as well as information about incidents or accidents, supports transparent reporting practices and ensures accountability to outside organizations, including regulatory bodies such as Federation of Medical Regulatory Authorities of Canada (FMRAC). Each program is responsible for monitoring and reviewing their respective FRM

policies and practices. A methodical and rigorous process for evaluating the FRM system components should be in place to ensure that the local FRM system is functioning effectively and improved as necessary over time. Audits of the FRM system can be conducted separately, or, as a component of the overall safety system evaluations within the clinical learning and practice environment.

When conducting an internal FRM audit, it is useful to consider the following:

- Does the internal audit system assess all the components of the FRM system?
- Are there additional areas that should be included in the audit that could yield valuable insight for the local practice context?
- Have all the relevant stakeholders, including learners, been surveyed or consulted to evaluate the utility and suitability of the system in place?
- What impact has the FRM plan had, if any? How can this be verified?
- Have there been follow up evaluations of the FRM training and education, compliance with the policy, duty schedules and other elements of the FRM plan?

The Role for Quality Assurance

Questions to Support the FRM Plan Audit

► Auditing Policy & Governance

- Has a fatigue policy been developed and/or implemented? If so, when was it last reviewed?
- Does the policy clearly articulate individual responsibilities of the learner and employer, Clinical Educator/Supervisor in managing fatigue? Do the governance and accountability relationships align with the goals outlined in the FRM policy? (For a full description of the roles and responsibilities of each group, see *Governance, Responsibility & Accountability*)

- When were the policy and procedures made available to all relevant stakeholders for input and final approval?
- Has the policy also been applied to independent contract/unaffiliated personnel?

► Auditing Training & Education

- Does the policy specifically help learners, supervisors and Program Directors/Clinical Directors understand:
 - The importance of managing the fatigue risk in the clinical learning and practice environment, and
 - The responsibility & role for mitigation of fatigue risk within acceptable levels in the workplace
- Have FRM Training and Education practices launched?
 - When will they be regularly reviewed and updated?
 - Is there a post-training evaluation measure in place?

► Auditing the Risk Assessment & Mitigation Plan

- Are there incident and accident investigation procedures in place? Is there a confidential, non-punitive reporting system to capture fatigue-related incidents over time?
- Is there an identified audit champion on the team, trained to audit the level of fatigue? Is there a plan to train successive individuals in this role?
- Is there a plan in place to conduct internal audits of the FRM strategy, policy and procedures? If so, how often?

The Role for Continuous Quality Improvement in FRM: QI vs QA

Quality Improvement (QI) has a clear delineation from Quality Assurance (QA), where the latter is demonstrated by compliance with the policies in place, investigating an adverse event and the subsequent observed change in individuals. Quality improvement is about making continual systems-level changes aimed at improving identified outcomes and preventing adverse events (Duke University School of Medicine, 2016). For example, QA for the FRM system would manifest as ensuring system-level monitoring and evaluation practices are in place alongside policies that support trainee and team level mitigation strategies. Whereas Quality Improvement aims to address whether the training offered has actually had an impact on reducing the fatigue-related risk for individuals or teams, and by how much in that specific context.

The risks associated with fatigue will vary based on the practice environment, resource availability, degree of staff changeover, the predominant work culture and shifting demands associated with the clinical learning

and practice environment. For the FRM strategy to succeed, it must evolve for improvement. As outlined by the ACOEM (2012), one of the critical features of any FRM system is the continuous improvement of the risk-reduction system via feedback, evaluation and modification. The tracking and sharing of lessons learned from accountability systems is also a critical aspect of effective quality improvement, and permits the aggregation of information (WHO, 2005) about how the FRM system is functioning. To remain adaptive and flexible to the local context, all elements of the FRM strategy in place should be reviewed and revised with consideration for specific areas of quality improvement in light of the changing environment. With the objective of building on existing quality assurance practices, key steps can be implemented to improve the quality of the FRM processes in place.

Additional Tools for Quality Improvement

1 Quality Improvement Primers:

- [Quality Improvement Science](#) (HQO, 2013) and,
- [Measurement for Quality Improvement](#) (HQO, 2013)

2 [PDSA Worksheet](#) (IHI, 2017)



Facilitating FRM Infrastructure

Knowledge Sharing & Best Practices

Conducting research, developing best practices, and sharing knowledge about fatigue risk management are the preeminent tools to further our understanding about circadian rhythms, the effects of fatigue, and fatigue risk management strategies. It will also promote a culture in which fatigue risk management is the norm. There are countless initiatives individuals, teams, units, and departments can actively engage with to further our comprehension and share knowledge about FRM principles and strategies.

Conference Workshops/ Presentations

Conferences provide an excellent opportunity to learn about innovative research, become familiar with new tools and resources, and become aware of progressive FRM approaches. There are numerous conferences dedicated to fatigue risk management and sleep science, physician and resident health and wellbeing, and medical leadership.

► Conferences Dedicated to FRM

- The International Conference on Residency Education (ICRE)
- International Conference on Physician Health (ICPH)
- The Canadian Conference on Medical Education (CCME)
- The Canadian Conference on Physician Leadership
- Canadian Conference on Physician Health
- International Conference on Managing Fatigue
- Canadian Sleep Society National Conference
- SLEEP (American Academy of Sleep Medicine)
- World Congress of Sleep Medicine

Online Training Modules, Workshops, & Presentations

Training and education will help teams recognize the signs and symptoms of fatigue, gain greater awareness about the impacts of fatigue, learn how to incorporate FRM into their daily lives, understand the appropriate responses to fatigue-related incidents, errors, and/or behaviours, and promote a culture of safety.

► Topics may include, but are not limited to:

- Developing a fatigue risk management program
- Fatigue countermeasures
- Fatigue self-risk assessment
- Promoting fatigue safety culture
- Recognition strategies
- The effects of fatigue
- Fatigue prevention
- Measuring fatigue and fatigue risk
- Scheduling systems and policies & alternative models of call
- Sleep health
- Mitigation strategies
- Analysis of fatigue-related error and near-misses
- Evaluation of fatigue risk management programs



Resource Development

Resources outlining steps to manage the effects of fatigue, improve safety and wellness, improve effectiveness and productivity will buttress the analysis of fatigue-related risk.

► Resources can include, but are not limited to:

- Best practices
- Fatigue risk assessment tools
- Bio-mathematical models
- Scheduling tools, scheduling models and fatigue monitoring technologies

Collaborative Research Projects

The active engagement in evidence-based research will enhance the body of knowledge and best practices on FRM and related issues. Collaborative research within units and between training sites facilitates an integrative approach and interdisciplinary research, resulting in an enriching experience as well as innovative investigations. Collaborative research projects will promote greater awareness and understanding about fatigue-related issues.

Identification and Sharing of Innovative Tools & Practices

Although no single fatigue risk management strategy is likely to be equally successful in every context, strategies can be adapted to best fit individuals, teams, and settings. Sharing strategies, tools, and resources enables the development of effective FRM practices, practices and strategies.



CLEARINGHOUSE OR FORUM for sharing of presentations, publications, and resources.

Forums for Leadership & Discussion Groups

Forums facilitate open, on-going discussions and collaboration about FRM and related issues among industry specialists.

Open forums and discussion groups with clear leadership structures enable industry experts to exchange ideas, share resources, support the collaborative development of best practices, and help keep FRM 'on the radar'. Forums and discussion groups can be established on a temporary basis to complement conferences, or maintained to promote the on-going development of fatigue and fatigue-related issues as they fall within the broader scope of resident wellness initiatives.



For a complete list of references, please visit:

WWW.RESIDENTFATIGUE.CA

“ We have a culture of long working hours, and the impact of fatigue has not been part of our consciousness. ”

Christopher P. Landrigan, MD, MPH Professor of Pediatrics, Harvard Medical School. Research Director, Boston Children's Hospital Inpatient Pediatrics Service Director, Sleep and Patient Safety Program, Brigham and Women's Hospital