

WORKERS COMPENSATION BOARD OF MANITOBA

**CRITERIA FOR PEER REVIEW OF
SCIENTIFIC RESEARCH
APPLICATIONS**

RESEARCH AND WORKPLACE INNOVATION PROGRAM

*Funding occupational health research, training and education
and innovative workplace solutions*

Criteria	Descriptor
DIMENSION 1	SCIENTIFIC MERIT
<ul style="list-style-type: none"> • The proposed study is well thought-out, original, clearly presented and embodies leading edge approaches and technology. • Relevant literature is critically appraised, evaluated and includes a thorough explanation of strengths, weaknesses or limitations of the existing literature and data. • The proposed study does not duplicate on-going and/or completed research by Canadian researchers and workers compensation boards. • The proposed study is relevant to workers compensation and provides a clear explanation of key issues that will be addressed. • Research objectives are clearly described and demonstrate the practical significance of the proposed research. 	<p>High to Outstanding: Score 3.0-4.0</p> <p>The proposed study is original, exceptionally well thought out and includes very clear explanations of key issues that will be addressed.</p> <p>The proposed study embodies leading edge approaches and technology demonstrating the extremely high caliber and excellence of the researcher/s.</p> <p>The literature review is remarkably exhaustive and includes a very detailed scan of on-going and completed Canadian research in this area of study.</p> <p>The proposed study significantly adds to and does not duplicate on-going and completed research by Canadian researchers and workers compensation boards.</p> <p>The proposed study is extremely relevant to workers compensation.</p> <p>Study results would strongly impact areas of concern important to workers compensation and substantially advance knowledge and understanding in this area.</p> <p>Adequate to Good: Score 2.0-2.9</p> <p>The proposed study is original, well thought out and includes explanations of key issues that will be addressed.</p> <p>The proposed study embodies up-to-date approaches and technology demonstrating the high caliber of the researcher/s.</p>

Criteria	Descriptor
	<p>The literature review is thorough and includes a scan of on-going and completed Canadian research in this area of study.</p> <p>The proposed study adds to and does not duplicate on-going and completed research by Canadian researchers and workers compensation boards.</p> <p>The proposed study is relevant to workers compensation.</p> <p>Study results would have impact on areas of concern important to workers compensation and contribute to the body of knowledge and understanding in this area.</p> <p>Needs Revision: Score 1.0-1.9</p> <p>The proposed study is not thoroughly thought out and lacks clarity in the explanations of key issues that will be addressed. The approaches and technology for the proposed study are appropriate.</p> <p>The literature review is incomplete and does not include a scan of on-going and completed Canadian research in this area of study or demonstrate knowledge of the area of study.</p> <p>The proposed study minimally adds to and somewhat duplicates on-going and completed research by Canadian researchers and workers compensation boards.</p> <p>The proposed study is somewhat relevant to workers compensation.</p> <p>Study results would have limited impact in areas of concern important to workers compensation or add to knowledge and understanding in this area.</p>

Criteria	Descriptor
	<p>Seriously Flawed: 0.0-0.9</p> <p>The proposed study is poorly thought out and seriously limited in its explanation of key issues that the study will address.</p> <p>The literature review is very poor, does not include a scan of on-going and completed Canadian research in this area of study and demonstrates a lack of core knowledge in this area of study.</p> <p>The proposed study does not add to and clearly duplicates on-going and completed research by Canadian researchers and workers compensation boards.</p> <p>The proposed study is not relevant to workers compensation.</p> <p>It is highly conceivable that the results of the study would not impact areas of concern important to workers compensation.</p>
DIMENSION 2	RESEARCH DESIGN AND METHODOLOGY
<ul style="list-style-type: none"> • The methodology and study disciplines are clearly described and parallel the objectives of the proposed study. • The proposed study presents a coherent and comprehensive set of activities that lead to the expected results/outcomes. • The data acquisition methods are practical and free of bias. 	<p>High to Outstanding: Score 3.0-4.0</p> <p>The research design and methodology is extremely well grounded scientifically, very clearly described and aligns with the objectives of the study.</p> <p>The research design is comprehensive and will definitely lead to the results planned for this study.</p> <p>The methods specified for data collection and analysis are highly appropriate and free of bias.</p> <p>The sampling will yield very reliable and valid results.</p> <p>Very potential ethical issues related to the study</p>

Criteria	Descriptor
<ul style="list-style-type: none"> • The measures specified for the analysis of the data are appropriate. • The proposed study sample is well-defined and the numbers of subjects in the study are sufficient to answer the research question unambiguously. • The proposed study is ethically sound. 	<p>are identified and resolved.</p> <p>Adequate to Good: Score 2.0-2.9</p> <p>The research design and methodology is scientifically acceptable and aligns with the objectives of the study.</p> <p>The research design is quite comprehensive and will generally lead to the results planned for this study.</p> <p>The methods specified for data collection and analysis are appropriate.</p> <p>The sampling will yield reliable and reasonably valid results.</p> <p>Ethical issues related to the study are identified and resolved.</p> <p>Needs Revision: Score 1.0-1.9</p> <p>The research design and methodology have limitations and should be revised and corrected to align with the objectives of the study.</p> <p>The research design is somewhat comprehensive and quite unlikely to lead to the results planned for this study.</p> <p>The methods specified for data collection are weak and limits accurate or verifiable analysis.</p> <p>The sampling is not sufficiently representative of the study population and most likely affect the reliability and validity of the study results.</p> <p>The ethical issues related to the study are not clearly identified or resolved.</p> <p>Seriously Flawed: 0.0-0.9</p> <p>The research design and methodology are not scientifically acceptable and do not synchronize</p>

Criteria	Descriptor
	<p>with the objectives of the study.</p> <p>The research design is not comprehensive and very unlikely will lead to the results planned for this study.</p> <p>The methods specified for data collection are very weak and will not permit accurate or verifiable analysis.</p> <p>The sampling is not representative of the study population and will not yield reliable results.</p> <p>The ethical issues related to the study are not identified or resolved.</p>
DIMENSION 3	KNOWLEDGE TRANSFER AND EXCHANGE
<ul style="list-style-type: none"> • There is an integrated knowledge transfer and exchange (KTE) plan from the start of the project to its completion. • The KTE plan is grounded in proven KTE models, practices and strategies. • There is a strategy for stakeholder engagement from the start of the project to its completion. • Target Audiences for the project are identified and messaging outlined in anticipation of expected project outcomes. • Information dissemination strategies are described in the KTE plan. 	<p>High to Outstanding: 3.0-4.0</p> <p>The KTE plan is very clearly developed and identifies very definite activities that will be undertaken at all key stages of the research and knowledge creation process.</p> <p>The KTE plan is very solidly grounded in proven KTE models, practices and strategies.</p> <p>The KTE plan engages an excellent array of stakeholders and user-groups at all key stages of knowledge creation and dissemination of research findings.</p> <p>The KTE plan very clearly identifies target audiences and messaging and is an excellent fit with the purpose, goals and core study areas.</p> <p>There is an excellent and detailed plan for the dissemination of research findings at the end of the study.</p> <p>Adequate to Good: 2.0-2.9</p>

Criteria	Descriptor
	<p>The KTE plan proposed for the study is clear and identifies activities that will be undertaken at key stages of the research and knowledge creation process.</p> <p>The KTE plan is grounded in proven KTE models, practices and strategies.</p> <p>The KTE plan engages an acceptable array of users and user-groups at each stage of knowledge creation and dissemination of research findings.</p> <p>The KTE plan clearly identifies target audiences and messaging and is a good fit with the purpose, goals and core study areas.</p> <p>There is a detailed plan for the dissemination of research findings at the end of the study.</p> <p>Needs Revision: 1.0-1.9</p> <p>The KTE plan proposed for the study is unclear and vague about the activities that will be undertaken at key stages of the research and knowledge creation process.</p> <p>The KTE plan is somewhat grounded in proven KTE models, practices and strategies.</p> <p>The KTE plan in a limited way engages users and user-groups at the knowledge creation and dissemination of research findings.</p> <p>The KTE plan is somewhat unclear about identifying target audiences and messaging and is vaguely connected to the purpose, goals and</p>

Criteria	Descriptor
	<p>core study areas.</p> <p>The plan for the dissemination of research findings at the end of the study is unclear and vague.</p> <p>Seriously Flawed: 0.0-0.9</p> <p>The KTE plan proposed for the study is extremely unclear and vague about the activities that will be undertaken at key stages of the research and knowledge creation process.</p> <p>The KTE plan is very weakly grounded in proven KTE models, practices and strategies.</p> <p>The KTE plan in a very limited way engages users and user-groups at the knowledge creation and dissemination of research findings.</p> <p>The KTE plan is unclear about identifying target audiences and messaging and there is no connection to the purpose, goals and core study areas.</p> <p>The plan for the dissemination of research findings at the end of the study is extremely unclear and vague.</p>
DIMENSION 4	MANAGEMENT OF PROPOSED RESEARCH AND RISK ASSESSMENT
<ul style="list-style-type: none"> • There is a comprehensive and realistic work-plan that covers all phases to achieve research goals. • The plan’s proposed timeline is achievable as critical milestones are identified to ensure 	<p>High to Outstanding: 3.0-4.0</p> <p>The work-plan is extremely well developed, goals are clearly defined and critical milestones identified within a very realistic timeframe.</p> <p>It appears to be extremely likely that the study will successfully achieve its goals and be completed on time.</p>

Criteria	Descriptor
<p>completion within the specified time.</p> <ul style="list-style-type: none"> • The estimated costs related to key research activities are specified. • The risk assessment identifies and describes potential risks, adequately assesses each risk and provides measures to mitigate each risk. • The proposed alternative approaches are practical and achievable and will not derail the study. 	<p>The proponents have thoughtfully and critically considered every possible risk to the project and propose very realistic and practical solutions to mitigate potential risks.</p> <p>Adequate to Good: 2.0-2.9</p> <p>The work-plan is fairly well developed, goals are defined and milestones identified within a realistic timeframe.</p> <p>It is likely that the study will achieve its goals and be completed within the proposed timeframe.</p> <p>The proponents have identified some potential obstacles and propose workable alternatives to mitigate potential risks.</p> <p>Needs Revision: 1.0-1.9</p> <p>The work-plan is reasonably developed but goals and key milestones are poorly defined. The time frame may not be realistic.</p> <p>It is uncertain whether the project will be completed within a realistic time frame.</p> <p>The proponents do not demonstrate that they have given adequate consideration to potential obstacles and solutions to mitigate risks.</p> <p>Seriously Flawed: 0.0-0.9</p> <p>The work-plan is vague and inadequate. The proposed work-plan would need to be reconsidered and redeveloped.</p> <p>It is unlikely that the study will achieve its purposes or be completed within a realistic time frame.</p>

Criteria	Descriptor
	The researchers have not undertaken a risk assessment.
DIMENSION 5	PROJECT BUDGET
<ul style="list-style-type: none"> • The project’s resource requirements are well thought out and thoroughly described with clear justification for each budget item. <p><i>(Resources include human, physical, financial, and technological)</i></p> <ul style="list-style-type: none"> • Administrative costs are reasonable and do not include blanket surcharges for institutional overheads. • There is no duplication or overlap in funding. • There is a clear link between budget line items and the study’s work-plan. 	<p>High to Outstanding: 3.0-4.0</p> <p>The budget justification is thorough and very clear. The overall budget is within an acceptable range for studies of this scope and type.</p> <p>Administrative costs are very fair and do not include blanket percentage administrative surcharges charged by academic institutions.</p> <p>Budget expenditures and the study’s milestones are very closely linked.</p> <p>There is no duplication of resources or funding from other sources.</p> <p>Adequate to Good: 2.0-2.9</p> <p>The budget justification is complete and clear. The overall budget is somewhat higher or lower than would normally be seen for studies of this scope and type.</p> <p>Administrative costs are reasonably fair and do not include blanket percentage administrative surcharges charged by academic institutions.</p> <p>Budget expenditures and the study’s milestones are linked.</p> <p>There is no duplication of resources or funding from other sources.</p> <p>Needs Revision: 1.0-1.9</p> <p>The budget justification is weak and incomplete. The overall budget is much higher or lower than would normally be seen for studies of this scope</p>

Criteria	Descriptor
	<p>and type.</p> <p>Administrative costs and/or blanket administrative surcharges charged by academic institutions are somewhat higher than expected.</p> <p>The link between budget expenditures and the study's milestones are vague or undefined.</p> <p>There may be some duplication of resources or funding from other sources.</p> <p>Seriously Flawed: 0.0-0.9</p> <p>The budget justification is extremely weak or missing. The overall budget is unacceptably high or significantly lower than would normally be seen for studies of this scope and type.</p> <p>Administrative costs and/or blanket administrative surcharges charged by academic institutions are much higher than expected.</p> <p>The link between budget expenditures and the study's milestones is quite unclear.</p> <p>It is very likely that duplication of resources or funding from other sources may occur.</p>
DIMENSION 6	EXPERTISE
<ul style="list-style-type: none"> • There is a clear fit in the knowledge, expertise and experience of the research team with the disciplines required for undertaking the proposed study. • The Principal Investigator (PI) has made significant contributions to research in this area and is capable of 	<p>High to Outstanding: 3.0-4.0</p> <p>There is an excellent representation of relevant disciplines.</p> <p>The PI is a nationally or internationally-recognized leader in his or her field and has exceptional knowledge in all areas of the study.</p> <p>The researchers have access to first class facilities and resources.</p> <p>Given their documented experience and</p>

Criteria	Descriptor
<p>coordinating and managing the proposed project.</p> <ul style="list-style-type: none"> The team has sufficient access to resources and the scientific environment in which the work will be done will support the successful completion of the proposed study. 	<p>expertise, the reviewer is highly confident that the applicants can do the work proposed.</p> <p>Adequate to Good: 2.0-2.9</p> <p>There is an adequate representation of relevant disciplines.</p> <p>The PI is known to have a strong background in the discipline related to the proposed study and has undertaken well-regarded studies in this field.</p> <p>The researchers have access to good facilities and resources.</p> <p>Given their documented experience and expertise, the reviewer is confident that the applicants can do the work proposed.</p> <p>Needs Revision: 1.0-1.9</p> <p>There is an inadequate representation of relevant disciplines.</p> <p>The researchers have limited knowledge in the study area and have had limited previous involvement in research activities related to the current proposed study.</p> <p>The researchers' access to appropriate facilities and resources is limited.</p> <p>Given their documented experience and expertise, the reviewer is not confident about the capability and expertise of the applicants to do the work proposed.</p> <p>Seriously Flawed: 0.0-0.9</p> <p>The relevant disciplines are poorly represented.</p> <p>The researchers do not have acceptable</p>

Criteria for Peer Review of Scientific Research Applications

Criteria	Descriptor
	<p>knowledge in the study area with little or no involvement in research activities related to the current proposed study.</p> <p>There is some access to facilities and resources.</p> <p>Given their documented experience and expertise, the reviewer is reasonably certain that the applicants do not have the capability and expertise to do the work proposed.</p>