



The Aboriginal Multiple Injury Questionnaire (AMIQ): The development of a musculoskeletal injury questionnaire for an Australian Aboriginal population.

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Suggested citation

Charles J (2017) The Aboriginal Multiple Injury Questionnaire (AMIQ): The development of a musculoskeletal injury questionnaire for an Australian Aboriginal population. *Australian Indigenous HealthBulletin* 17(3)

Acknowledgement: I would like to acknowledge the traditional owners of all the many Aboriginal and Torres Strait Islander Nations that make the great continent of Australia. I would like to pay my respects to the Aboriginal and Torres Strait Islander elders past and present, also the young community members, as the next generation of leaders and representatives.

Disclaimer: In some instances in this paper I will be using the term 'Aboriginal' to describe both Aboriginal and Torres Strait Islander people. This is due to word restrictions, and no disrespect is intended to any individual or group.

Abstract

Objective: Studies have shown Aboriginal People have high rates of ankle, knee and back injury, also foot health is poor. However there is no specific questionnaire for musculoskeletal injury for Aboriginal Australians to investigate the impact of injuries on quality of life. A musculoskeletal injury questionnaire needs to be developed specifically for Aboriginal People.

Methods: A search of literature for musculoskeletal injury questionnaires was conducted to find an appropriate questionnaire that could be modified to use in an Aboriginal population and for different types of injury. Five appropriate questionnaires were discovered and assessed against desirable criteria for a culturally appropriate injury questionnaire.

Results: The Bristol Foot Score (BFS) was found to be the most appropriate questionnaire, particularly as it is patient centred. However, in its original format it did not meet all the desirable criteria and modifications were required for use in the Aboriginal community and for use with different types of injuries.

Conclusions: Aboriginal people have high percentages of musculoskeletal injuries. An Aboriginal Musculoskeletal Injury Questionnaire (AMIQ) has been developed from a modified Bristol Foot Score (BFS). The AMIQ can assess the impact of foot, ankle, knee and back injuries on quality of life in the Aboriginal community.

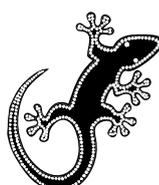
Implications: The AMIQ is designed to evaluate access to treatment by the Aboriginal community. The AMIQ also provides a quantitative summary score which can be used to gauge the impact of injury on the Aboriginal community and this can be used to investigate improvement of injury over time. It is important to have a culturally appropriate AMIQ to use for the Aboriginal community.

Key Words: Aboriginal, Musculoskeletal, Questionnaire and Injury

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Core funding
is provided by the
Australian Government
Department of Health



Australian Indigenous
HealthInfoNet



Background

Aboriginal Australians are athletic [1-4], sport and physical activities are very important to many Aboriginal cultures [2, 5, 6]. Aboriginal Australians participate in sport and athletics at all levels, from social to elite [7], in very high numbers [8-11]. Although it is important for Aboriginal individuals and communities to participate in sport and physical activities, research has shown ankle, knee and back injuries are very high [12-14]. It has also been shown that Aboriginal foot health is poor, and exponentially getting worse [15]. Studies have found that musculoskeletal injury is higher for Aboriginal Australians than non-Aboriginal Australians [16], and these injuries are often higher for Aboriginal women [17]. Research found these high rates of injury were also highly prevalent in young Aboriginal Australians [14]. Similar injury rates were found in other Indigenous populations around the world [18]. However none of these studies looked at the impact these injuries had on mobility, weight gain, quality of life or social and emotional wellbeing for Aboriginal Australians. Therefore a specific, culturally appropriate, musculoskeletal injury questionnaire is required to evaluate injury in the Aboriginal community.

Desirable Criteria: Patient centred, subjective measure, non-specific for group or injury, not complicated or ambiguous, not time consuming, makes no assumptions, quantifiable, able to be modified, freely available, no cost, reliable and valid. These criteria were derived from what the author considered to be the most practical and desirable for collecting information on musculoskeletal injuries in the Aboriginal community.

Culturally Appropriate Criteria: One of the most important criteria for an Aboriginal questionnaire is being patient centred, or patient focused i.e. the questionnaire should give the patients perspective. It is central to being culturally appropriate to consult and engage, giving the Aboriginal community a 'voice' in their health care, education and involvement in research [19]. In the past, Aboriginal people have been examined, had tests, been diagnosed, given treatment e.g. medication(s), without explanation or engagement. This lack of engagement, and consultation is likely why these interventions have not always been successful [20]. Aboriginal Australians must be consulted and seen as key 'stakeholders' in decision making [21]. A patient focus and giving Aboriginal people a 'voice' is also related to the need to have a questionnaire that is subjective i.e. giving the Aboriginal participant the opportunity to tell their story of musculoskeletal injury and how these injuries have affected them. Ideally the questionnaire would be broad and not too specific for any condition or cohort, as the questionnaire is proposed to be used on a broad range of injuries in the Aboriginal community. It is well documented that education and literacy levels are low in many Aboriginal communities [22, 23]. Therefore

there is a need to use a questionnaire which is not complicated to understand, or ambiguous, and the questions can be asked by the health professional, educator or researcher i.e. does not require the participant to read questions. Not requiring Aboriginal participants to read the questions or write their answers is also culturally appropriate, as most Aboriginal cultures did not record their history or culture in writing, it was told in story, and actively listening [24]. There is a lot of research being conducted in Aboriginal communities, and some Aboriginal individuals and communities are becoming fatigued. It is not important in many Aboriginal cultures for individuals to dedicate vast amounts of time talking about themselves, especially about pain and suffering. Therefore it is desirable and culturally appropriate to keep the questionnaire concise, and not too time consuming. Many questionnaires make judgements about participants e.g. education level, literacy levels, employment, but many Aboriginal people don't value western knowledge, and prefer Aboriginal ways of knowing, being and doing [25, 26]. Therefore it is culturally appropriate to have a questionnaire that does not make assumptions about Aboriginal participant's western education. Many Aboriginal people have English as a second or third language, and traditional language is central to culture [24, 27], so it is culturally appropriate to have a questionnaire that is unambiguous. It is extremely likely that any questionnaire would need to be modified at some level to meet all criteria, so it is important that any potential questionnaire lend itself to modification easily. As there is a need to use a pre-existing questionnaire, it is paramount to find a questionnaire that is freely available and at no cost to any individual or community. In many Aboriginal cultures, sharing and reciprocity is very important [28], so it is culturally appropriate to produce a questionnaire that is freely available to anyone. It is also important to have a freely available questionnaire because it is well documented Aboriginal Australians have less income than non-Aboriginal Australians [29].

Questionnaire

To gauge the prevalence of musculoskeletal injury and the impact on the Aboriginal community, a subjective, culturally appropriate, injury quality of life measure is required. A subjective (self-reported), patient centred questionnaire is also a culturally appropriate method of gaining this type of information. It is essential to allow the Aboriginal community to have a 'voice' [19] and be able to tell the health professional or researcher what their injury problems are, and how this is affecting their day to day activities. Rather than a health professional, educator or researcher providing their opinion of what the Aboriginal community problems are and how this is affecting them.

A literature search was conducted, musculoskeletal injury questionnaire/survey papers were identified by searching the

EMBASE, Medline, PubMed, EBSCOhost, and Cinahl databases. The search was conducted using the search terms: injury, pain, musculoskeletal, foot, survey and questionnaire. This search produced five potential questionnaires/surveys that could be adapted for developing an Aboriginal Multiple Injury Questionnaire (AMIQ). The five questionnaires/surveys were evaluated against desirable criteria, which were specific for the AMIQ and culturally appropriate for the Aboriginal community. It should be noted that none of the questionnaires/surveys evaluated were designed specifically for the use with Aboriginal Australians.

Questionnaire/Survey Evaluation: The Foot Health Survey (FHS) Redmond (2008) [30, 31] was developed by the Charcot Marie Tooth Association of Australia (CMTAA) appears to be a well-designed survey. Although it is a weakness that it has been developed specifically for people with Charcot Marie Tooth (CMT). CMT sufferers often have extreme problems with their feet, and these complications can make walking very difficult, which may limit the transferability of the FHS. The FHS is very long and time consuming, it has been developed by the members of the CMTAA for their specific needs. The FHS has not been validated and has not been cited, likely because of its specific focus. The FHS has some potential for use in the Aboriginal community and for other injuries but would require huge modification and not ideal for the development of an AMIQ due to time required of participants.

The Oxford Ankle Foot Questionnaire (OAFQ) developed by Morris et al. (2009) [32] is a very well-constructed questionnaire, which has been validated. It has been cited 46 times and appears to be a very good quality questionnaire. It has been developed and designed for qualitative research with focus groups, and the questions are audio recorded and analysed which may complicate the process and introduce ethical considerations with its use with the AMIQ. The OAFQ has been developed for children that have injuries or disabilities that may require surgery. The line of questioning is very much focused on child activities, which is not the proposed focus of the AMIQ. Although a very well designed questionnaire it does not appear that the OAFQ would be adaptable or appropriate for the use with an adult Aboriginal population.

The Foot Function Index (FFI) developed by Budiman-Mak et al. (1991) [33] appears to be a very straight forward, unambiguous questionnaire. It is subjective with quantitative results from 23 questions which were developed by health professionals. The questions are under three topics i.e. pain, disability and limitations with a 10 point scale which makes it quantifiable. It appears the FFI would not be time consuming, easy to use and with no personal questions. It has 1,913 citations and has been validated by Budiman-Mak et al. (1991), but that was only for the use with participants with arthritis. Agel et al. (2006) examined the FFI for reliability and found that it may not be appropriate for people who

have normal foot function [34]. The FFI was tested for reliability by Landorf et al. (2006) with the use of orthotics for plantar fasciitis and found it had good test retest reliability and a high degree of internal consistency [35]. The FFI has potential with some modification, and met many of the AMIQ criteria. It may have some potential to be adapted for other uses, but it may require a great deal of modification for use in the Aboriginal population and for other types of injuries e.g. ankle, knee and back.

The Foot Health Status Questionnaire (FHSQ) developed by Bennett et al. (1998) [36] has been widely used and has been cited 270 times. It is subjective and reportedly only takes between 3 to 5 minutes to conduct [36]. It seems a little ambiguous and the questions make some assumptions e.g. that all people wear shoes and work [36] which may not be appropriate for the AMIQ. The FHSQ was developed to assess patient's pre and post-surgery which is not ideal for the development of the AMIQ. Contact was made via email and an automatic reply was received, informing the enquirer where the AU\$150 could be sent to use the questionnaire, and permission for modification was not given. It has been validated, and was found to have good test-retest reliability. However the questions are developed from a health professional's perspective, which is not ideal for use in the Aboriginal community. This questionnaire is not freely available, may not be appropriate for Aboriginal Australians or for use with other types of injuries. The FHSQ is possible not ideal for the objectives of the AMIQ and the cost may be prohibitive.

The Bristol Foot Score (BFS) developed by Barnett et al. (2005) [37] and has been cited 496 times. Over 400 community based podiatric patients were used to develop the questions in the BFS. Dr Barnett started with 41 original questions, gradually eliminating inappropriate questions based on participant feedback e.g. insufficient detail, too long, people chose not to answer, repetition. The remaining 15 questions were used in the final version (version 5) of the BFS. Factor analysis showing three main areas of relevant questions i.e. pain, mobility and general foot health. It was developed for general use, for people of all ages and conditions, which is an important criteria for AMIQ. The BFS is unambiguous, is very simple to use, and not time consuming (only takes 3-5 mins) [37]. There are no general or personal assumptions made about participants. The BFS has been validated and it was found to have an excellent test-retest score and internal reliability, with a Cronbach alpha of 0.9036 [37]. The BFS was also shown to produce reliable results over time which is very important for accessing injury or pain over time [37]. It was specifically designed as a subjective measure of foot health, which reflects the participants perceptions of their own foot health [37], which is a paramount criteria for the AMIQ. The questions were developed to collect information on the impact on peoples everyday life [37] i.e. a quality of life measure which is

also an important criteria for the AMIQ. It was designed as a 'self-administered' questionnaire [37] but these questions could easily be asked by a health professional, educator or researcher, which is important due to literacy issues with some Aboriginal community members [22, 23]. The BFS is quantifiable with all questions having a three to six point rating system with a numerical value attachment to each answer, which can be accumulated to give a total injury score [37]. The BFS is specifically designed to be 'patient centred' and focuses on perceptions of pain from the patients perspective and not to reflect the health professionals or researchers opinion [37]. The BFS is 'freely available' [37] but contact was made with Dr Barnett, permission to use and modify the BFS was granted. The BFS meets most of the AMIQ criteria and can easily be modified to be used for other types of musculoskeletal injury. The BFS is the most appropriate questionnaire/survey and therefore was chosen to be modified for development of the AMIQ.

Modified Bristol Foot Score: There are some modifications that would be needed to make the BFS more culturally appropriate for use in the Aboriginal community and suitable for other musculoskeletal injuries. One of the things that makes the BFS most appropriate to be modified to be used for other musculoskeletal injuries is that replacing the word 'foot' with ankle, knee and back doesn't change the meaning or the structure of the questions. The BFS will be modified to develop an Aboriginal Multiple Injury Questionnaire (AMIQ). The AMIQ will be culturally appropriate for Aboriginal Australians, by being patient centred, unambiguous, not time consuming, makes no assumptions, freely available, and at no cost. The AMIQ will also be able to investigate foot, ankle, knee and back injuries, however it can be used to just investigate just one specific injury, if preferred. The AMIQ will include questions on the impact of injury on weight gain (from the participants perspective), and record access to treatment for injury, as self-reported by participants. The BFS asks participants to reflect over the past two weeks, but it is desirable to have the AMIQ get participants to reflect over the past 6 months, so this will be modified to change '2 weeks' to '6 months' in all relevant questions. The BFS Question 6: asks participants to state how often they are 'conscious of my feet' [37] and this may not be clear to some participants and this question has been removed. The BFS Question 7: states how often have you 'felt fed up about my feet' [37] this may not be clearly definable to all participants and it has been removed. The BFS Question 8: asks participants 'I have felt worried that my feet will get worse in the future' [37] however the AMIQ is concerned about the current situation and recent history, so this question was removed. The BFS Question 9: asks 'I have felt my feet are not really part of me' [37] this question was deemed slightly ambiguous and was also removed. The BFS Questions: 11, 12 and 13 all ask about footwear/shoes [37] and although the AMIQ will investigate foot injury, many Aboriginal people do not wear shoes or only wear slip-on

open-toed footwear [38] so these questions have been removed. The BFS Question 15 asks about 'general health' [37] but the AMIQ is investigating musculoskeletal injury, so question 15 was also deleted. The remaining questions were included in the new AMIQ, reducing these unwanted questions also reduces the time to complete the AMIQ. The BFS lends itself to modification for use with other musculoskeletal injuries very easily e.g. the questions are generic, if the word 'foot' is replaced with ankle, knee, or back, the question still has the same meaning. The three to six point scale for answers also remains relevant when 'foot' is exchanged with ankle, knee or back. This ability of the BFS to be so flexible and modifiable was not likely by design but the BFS has proven to be ideal for conversion to use with other musculoskeletal injury and the development of the AMIQ.

Aboriginal Multiple Injury Questionnaire (AMIQ): The AMIQ (see Appendix 1) asks participants if they have ever had previous and/or have a current foot, ankle, knee and back injury. These questions are important to establish some injury history and current status of injury. The preliminary questions also direct the health professional or researcher to the appropriate injury questionnaire i.e. if the participant say they have a current foot, ankle, knee, or back injury, then the relevant questionnaire for that injury(s) is conducted.

Being over-weight or obese is a problem for many Australians but this is even worse for Aboriginal Australians, especially Aboriginal women [39], therefore it was considered appropriate to include a question about weight gain in relation to injury i.e. AMIQ question 'Due to your "....." Injury have you put on weight in the last 6 months?' and then if participants answer 'yes' they are required to nominate the amount of weight they believe they have gained i.e. yes 1kg or less, yes 1-5kg, yes 5-10kg, yes 10kg or more. This is to try and gauge the impact of injury on weight gain from the Aboriginal communities' perspective.

Access to treatment for musculoskeletal injury and other health problems is an issue for many Aboriginal communities, especially in rural and remote areas [40]. Place of residence is considered an extremely important aspect of Aboriginal health, particularly access to health service in different residential areas [40]. Approximately 34% of all Aboriginal people live in cities, and 22% live in inner regional centres, with 21% living in outer regional areas, compared to 71%, 18% and 9% respectfully of non-Aboriginal Australians [41]. The greatest difference in residence between Aboriginal and other Australians is remote and very remote, with approximately 7 times more Aboriginal people living in remote areas [41]. Location of residence makes a difference to access to health care, and life expectancy at birth for Aboriginal people [42]. Therefore it was considered important to ask where participants live, and include a question in the AMIQ about treatment for injuries i.e. AMIQ question 'Over the past 6 months, have you had treatment for your

“.....” injury?’. This is designed to allow the Aboriginal community an opportunity to directly provide information about treatment they have or have not received for their injuries.

The AMIQ has a total of 11 questions, with a minimum Total Accumulative Score (TAS) of 9 and a maximum TAS of 59. The TAS from the AMIQ can be used as a guide to the level an injury is negatively effecting an individual. The TAS can be interpreted as: a score (<10) not a problem, (10-22) minor problem, (23-35) moderate problem, (36-47) major problem, and (48-59) extreme problem. The TAS can also be used to ascertain improvement or worsening of injury after a period of time or treatment, by repeating the AMIQ at a later date. The validation of the BFS was an extensive process [37], and the BFS was used as the basis of the AMIQ. However the AMIQ was also pilot tested on a small group (n=24) of Aboriginal rugby league players, 12 male and 12 female, participating in an injury prevention health promotion program [14].

Discussion

There has been limited investigation in to foot health in the Aboriginal population but research suggests it is poor and not improving [15] and the AMIQ will provide an opportunity investigate foot injury. Ankle injury has been investigated in an Aboriginal population, and a report with a very small sample (n=24) showed 42% of participants had an ankle injury in the past 6 months [14]. There has been some investigation into knee injury in an Aboriginal population, and a report (n=24) stated 1 in 4 of participants had a knee injury in the past 6 months [14]. There has been some previous research finding high levels of back injury or pain in Aboriginal populations [12, 13, 17, 18]. A Vindigni et al. 1996 study reported 42 (48.3%) Aboriginal male (n=87) and 33 (32.4%) Aboriginal females (n=102) reported having a back injury in the previous 7 days [12]. Others also found similar results for back injury or pain in an Aboriginal population [13, 14, 17, 18]. Foot, ankle, knee and back injuries and the associated pain, can be debilitating, causing sufferers to reduce activity, training and sport. This can have effects on health directly but can also limit cultural and social activities. Reduced physical and cultural activities can also effect quality of life and social and emotional well-being. Reduction in activity, training and sport can also lead to weight gain, and obesity, which is very high in the Aboriginal population [39]. The AMIQ will allow the Aboriginal community to express how injuries are affecting their day to day lives, and social and emotional well-being, and also provide information on the prevalence of these injuries in the community.

Limitation

The literature search conducted was not systematic review, and therefore some other relevant questionnaires/surveys may not have been discovered or evaluated in this study. Health professionals, researchers and Aboriginal community members may have wanted to include other criteria for the AMIQ but the author has tried to include all relevant and appropriate criteria.

Conclusion

Studies have identified high rates of musculoskeletal injuries in the some Aboriginal populations. Injury, the associated pain and the reduced activity that follows, in some cases may results in weight gain, which can lead to chronic disease. The AMIQ can provide a culturally appropriate questionnaire and will provide valuable information on the impact of foot, ankle, knee and back injuries. The AMIQ will also produce a numerical summary of injury i.e. TAS which will give health providers, educators, policy makers, researchers and the Aboriginal community new reliable data on injury and its impact on Aboriginal People. The AMIQ will be freely available, at no cost to any individuals, or organisations interested in investigating musculoskeletal injury in the Aboriginal community.

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Appendix 1

Aboriginal Multiple Injury Questionnaire (AMIQ)

Participants Name _____
 Date ____/____/_____
 Male or Female _____
 Date of Birth ____/____/_____
 Town of Residence _____

Have you ever had an ankle injury?	Yes / No
Do you have a current ankle injury?	
If answered "yes" go to the Aboriginal Ankle Injury Questionnaire.	Yes / No
Have you ever had a knee injury?	Yes / No
Do you have a current knee injury?	
If answered "yes" go to the Aboriginal Knee Injury Questionnaire.	Yes / No
Have you ever had a back injury?	Yes / No
Do you have a current back injury?	
If answered "yes" go to the Aboriginal Back Injury Questionnaire.	Yes / No
Have you ever had a foot injury?	Yes / No
Do you have a current foot injury?	
If answered "yes" go to the Aboriginal Foot Injury Questionnaire.	Yes / No

Aboriginal Ankle Injury Questionnaire

Which ankle is injured? Left or Right

1. How often have you had ankle(s) pain? (Please tick in one box only)

All of the time	<input type="checkbox"/>	6
Most of the time	<input type="checkbox"/>	5
A good bit of the time	<input type="checkbox"/>	4
Some of the time	<input type="checkbox"/>	3
A little of the time	<input type="checkbox"/>	2
None of the time	<input type="checkbox"/>	1

2. How painful has your ankle(s) been (Please tick in one box only)

Not painful	<input type="checkbox"/>	1
Very slightly painful	<input type="checkbox"/>	2
Slightly painful	<input type="checkbox"/>	3
Moderately painful	<input type="checkbox"/>	4
Very painful	<input type="checkbox"/>	5
Extremely painful	<input type="checkbox"/>	6

3. Do problems with your ankle(s) affect you when standing still?

(Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1

4. Do problems with your ankle(s) affect you when walking a short distance? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1
Does not apply because I choose not to walk.	<input type="checkbox"/>	9

5. Do problems with your ankle(s) affect when you play sport or other activity? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1
Does not apply because I choose not to do this.	<input type="checkbox"/>	9

6. Do problems with your ankle(s) affect you when walking on bumpy or stony ground? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1
Does not apply because I choose not to do this	<input type="checkbox"/>	9

7. Over the past 6 months how often has your ankle(s) affected your day to day living? (Please tick in one box only)

All of the time	<input type="checkbox"/>	6
Most of the time	<input type="checkbox"/>	5
A good bit of the time	<input type="checkbox"/>	4
Some of the time	<input type="checkbox"/>	3
A little of the time	<input type="checkbox"/>	2
None of the time	<input type="checkbox"/>	1

8. In general would you say your ankle(s) is:

(Please tick in one box only)

Excellent	<input type="checkbox"/>	1
Very good	<input type="checkbox"/>	2
Good	<input type="checkbox"/>	3
Fair	<input type="checkbox"/>	4
Poor	<input type="checkbox"/>	5

9. Due to your ankle(s) injury have you put on weight in the last 6 months? (Please tick in one box only)

Yes 10kg or more	<input type="checkbox"/>
Yes 5-10kg	<input type="checkbox"/>
Yes 1-5kg	<input type="checkbox"/>
Yes 1kg or less	<input type="checkbox"/>
Not at all	<input type="checkbox"/>

10. Over the last 6 months, have you had treatment for your ankle injury? (Please tick in one box only)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

11. Because of your ankle(s) injury have you had problems sleeping? (Please tick in one box only)

Yes, very frequently	<input type="checkbox"/>	5
Yes, frequently	<input type="checkbox"/>	4
Yes, sometimes	<input type="checkbox"/>	3
Rarely	<input type="checkbox"/>	2
Not at all	<input type="checkbox"/>	1

AMIQ (Ankle Injury) Total Accumulated Score:

<10 not a problem, 10-22 minor problem, 23-35 moderate problem, 36-47 major problem, 48-59 extremely problem.

Aboriginal Knee Injury Questionnaire

Which knee is injured? Left or Right

1. How often have you had knee(s) pain? (Please tick in one box only)

All of the time	<input type="checkbox"/>	6
Most of the time	<input type="checkbox"/>	5
A good bit of the time	<input type="checkbox"/>	4
Some of the time	<input type="checkbox"/>	3
A little of the time	<input type="checkbox"/>	2
None of the time	<input type="checkbox"/>	1

2. How painful has your knee(s) been (Please tick in one box only)

Not painful	<input type="checkbox"/>	1
Very slightly painful	<input type="checkbox"/>	2
Slightly painful	<input type="checkbox"/>	3
Moderately painful	<input type="checkbox"/>	4
Very painful	<input type="checkbox"/>	5
Extremely painful	<input type="checkbox"/>	6

3. Do problems with your knee(s) affect you when standing still? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1

4. Do problems with your knee(s) affect whether you walk a short distance? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1
Does not apply because I choose not to walk	<input type="checkbox"/>	9

5. Do problems with your knee(s) affect whether you play sport or other activity? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1
Does not apply because I choose not to do this	<input type="checkbox"/>	9

6. Do problems with your knee(s) affect you when walking on bumpy or stony ground? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1
Does not apply because I choose not to do this	<input type="checkbox"/>	9

7. Over the past 6 months how often has your knee(s) affected your day to day living? (Please tick in one box only)

All of the time	<input type="checkbox"/>	6
Most of the time	<input type="checkbox"/>	5
A good bit of the time	<input type="checkbox"/>	4
Some of the time	<input type="checkbox"/>	3
A little of the time	<input type="checkbox"/>	2
None of the time	<input type="checkbox"/>	1

8. In general would you say your knee(s) health is: (Please tick in one box only)

Excellent	<input type="checkbox"/>	1
Very good	<input type="checkbox"/>	2
Good	<input type="checkbox"/>	3
Fair	<input type="checkbox"/>	4
Poor	<input type="checkbox"/>	5

9. Due to your knee(s) injury have you put on weight in the last 6 months? (Please tick in one box only)

Yes 10kg or more	<input type="checkbox"/>
Yes 5-10kg	<input type="checkbox"/>
Yes 1-5kg	<input type="checkbox"/>
Yes 1kg or less	<input type="checkbox"/>
Not at all	<input type="checkbox"/>

10. Over the last 6 months, have you had treatment for your knee(s) injury? (Please tick in one box only)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

11. Because of your knee(s) injury have you had problems sleeping? (Please tick in one box only)

Yes, very frequently	<input type="checkbox"/>	5
Yes, frequently	<input type="checkbox"/>	4
Yes, sometimes	<input type="checkbox"/>	3
Rarely	<input type="checkbox"/>	2
Not at all	<input type="checkbox"/>	1

AMIQ (Knee Injury) Total Accumulated Score:

<10 not a problem, 10-22 minor problem, 23-35 moderate problem, 36-47 major problem, 48-59 extremely problem.

Aboriginal Back Injury Questionnaire

Which part of the back is injured? Low Middle High

1. How often have you had back pain?

(Please tick in one box only)

All of the time	<input type="checkbox"/>	6
Most of the time	<input type="checkbox"/>	5
A good bit of the time	<input type="checkbox"/>	4
Some of the time	<input type="checkbox"/>	3
A little of the time	<input type="checkbox"/>	2
None of the time	<input type="checkbox"/>	1

2. How painful has your back pain been?

(Please tick in one box only)

Not painful	<input type="checkbox"/>	1
Very slightly painful	<input type="checkbox"/>	2
Slightly painful	<input type="checkbox"/>	3
Moderately painful	<input type="checkbox"/>	4
Very painful	<input type="checkbox"/>	5
Extremely painful	<input type="checkbox"/>	6

3. Do problems with your back pain affect you when standing still?

(Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1

4. Do problems with your back pain affect whether you walk a short distance? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1

Does not apply because I choose not to walk 9

5. Do problems with your back pain affect whether you play sport or other activity? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1
Does not apply because I choose not to do this	<input type="checkbox"/>	9

6. Do problems with your back pain affect you when walking on bumpy or stony ground? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1
Does not apply because I choose not to do this	<input type="checkbox"/>	9

7. Over the past 6 months how often has your back pain affected your day to day living? (Please tick in one box only)

All of the time	<input type="checkbox"/>	6
Most of the time	<input type="checkbox"/>	5
A good bit of the time	<input type="checkbox"/>	4
Some of the time	<input type="checkbox"/>	3
A little of the time	<input type="checkbox"/>	2
None of the time	<input type="checkbox"/>	1

8. In general would you say your back health is:

(Please tick in one box only)

Excellent	<input type="checkbox"/>	1
Very good	<input type="checkbox"/>	2
Good	<input type="checkbox"/>	3
Fair	<input type="checkbox"/>	4
Poor	<input type="checkbox"/>	5

9. Due to your back injury have you put on weight in the last 6 months?

(Please tick in one box only)

Yes 10kg or more	<input type="checkbox"/>
Yes 5-10kg	<input type="checkbox"/>
Yes 1-5kg	<input type="checkbox"/>
Yes 1kg or less	<input type="checkbox"/>
Not at all	<input type="checkbox"/>

10. Over the last 6 months, have you had treatment for your back injury? (Please tick in one box only)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

11. Because of your back injury do you have problems sleeping?
(Please tick in one box only)

Yes, very frequently	<input type="checkbox"/>	5
Yes, frequently	<input type="checkbox"/>	4
Yes, sometimes	<input type="checkbox"/>	3
Rarely	<input type="checkbox"/>	2
Not at all	<input type="checkbox"/>	1

AMIQ (Back Injury) Total Accumulated Score:

<10 not a problem, 10-22 minor problem, 23-35 moderate problem, 36-47 major problem, 48-59 extremely problem.

Aboriginal Foot Injury Questionnaire

Which foot is injured? Left or Right

1. How often have you had foot/feet pain?

(Please tick in one box only)

All of the time	<input type="checkbox"/>	6
Most of the time	<input type="checkbox"/>	5
A good bit of the time	<input type="checkbox"/>	4
Some of the time	<input type="checkbox"/>	3
A little of the time	<input type="checkbox"/>	2
None of the time	<input type="checkbox"/>	1

2. How painful has your foot/feet been?

(Please tick in one box only)

Not painful	<input type="checkbox"/>	1
Very slightly painful	<input type="checkbox"/>	2
Slightly painful	<input type="checkbox"/>	3
Moderately painful	<input type="checkbox"/>	4
Very painful	<input type="checkbox"/>	5
Extremely painful	<input type="checkbox"/>	6

3. Do problems with your foot/feet affect you when standing still?

(Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1

4. Do problems with your foot/feet affect you when walking a short distance? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1
Does not apply because I choose not to walk.	<input type="checkbox"/>	9

5. Do problems with your foot/feet affect when you play sport or other activity? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1
Does not apply because I choose not to do this.	<input type="checkbox"/>	9

6. Do problems with your foot/feet affect you when walking on bumpy or stony ground? (Please tick in one box only)

A major problem	<input type="checkbox"/>	4
A moderate problem	<input type="checkbox"/>	3
A bit of a problem	<input type="checkbox"/>	2
Not a problem	<input type="checkbox"/>	1
Does not apply because I choose not to do this	<input type="checkbox"/>	9

7. Over the past 6 months how often has your foot/feet affected your day to day living? (Please tick in one box only)

All of the time	<input type="checkbox"/>	6
Most of the time	<input type="checkbox"/>	5
A good bit of the time	<input type="checkbox"/>	4
Some of the time	<input type="checkbox"/>	3
A little of the time	<input type="checkbox"/>	2
None of the time	<input type="checkbox"/>	1

8. In general would you say your foot/feet is:

(Please tick in one box only)

Excellent	<input type="checkbox"/>	1
Very good	<input type="checkbox"/>	2
Good	<input type="checkbox"/>	3
Fair	<input type="checkbox"/>	4
Poor	<input type="checkbox"/>	5

9. Due to your foot/feet injury have you put on weight in the last 6 months? (Please tick in one box only)

Yes 10kg or more	<input type="checkbox"/>
Yes 5-10kg	<input type="checkbox"/>
Yes 1-5kg	<input type="checkbox"/>
Yes 1kg or less	<input type="checkbox"/>
Not at all	<input type="checkbox"/>

10. Over the last 6 months, have you had treatment for your foot/feet injury? (Please tick in one box only)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

11. Because of your foot/feet injury have you had problems sleeping?

(Please tick in one box only)

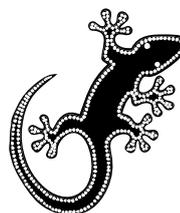
Yes, very frequently	<input type="checkbox"/>	5
Yes, frequently	<input type="checkbox"/>	4
Yes, sometimes	<input type="checkbox"/>	3
Rarely	<input type="checkbox"/>	2
Not at all	<input type="checkbox"/>	1

AMIQ (Foot Injury) Total Accumulated Score:

<10 not a problem, 10-22 minor problem, 23-35 moderate problem, 36-47 major problem, 48-59 extremely problem.



Australian Indigenous
HealthBulletin



Australian Indigenous
HealthInfoNet

The Australian Indigenous *HealthBulletin* (ISSN 1445-7253) is the electronic journal of the Australian Indigenous *HealthInfoNet*.

The purpose of the Australian Indigenous *HealthBulletin* is to facilitate access to information of relevance to Australian Indigenous health. Reflecting the wide range of users – policy makers, service providers, researchers, students and the general community – the *HealthBulletin* aims to keep people informed of current events of relevance, as well as recent research. Research information is provided in two ways – the publication of original research and the presentation of abstracts of research published or presented elsewhere.

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Core funding
is provided by the
Australian Government
Department of Health

