

Health and Fitness Journal of Canada

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Volume 7

May 30, 2014

Number 2

NOTES FOR FITNESS AND HEALTH PROFESSIONALS

The ePARmed-X+ Physician Clearance Follow-up

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Abstract

The new Physical Activity Readiness Questionnaire for Everyone (PAR-Q+) and the new online electronic Physical Activity Readiness Medical Examination (ePARmed-X+) pre-participation clearance and risk stratification strategy reduces markedly the barriers to physical activity participation. This includes paper and online versions of the new PAR-Q+ and ePARmed-X+. These forms are meant for everyone regardless of age, sex, or health status. The ePARmed-X+ is an easy to follow interactive program (www.eparmedx.com) that can be used to determine an individual's readiness for increased physical activity participation or a fitness appraisal. The ePARmed-X+ supplements the paper and online versions of the new PAR-Q+. Individuals who use the ePARmed-X+ have had a positive response to the follow-up questions on the PAR-Q+, or have been directed to the online program by a qualified exercise professional or another healthcare professional, owing to his/her current medical condition. At the end of the ePARmed-X+, it is possible that the participant is advised to consult a physician to discuss the various options regarding becoming more physically active. In this instance, the participant will be required to receive medical clearance for physical activity from a physician. Until this medical clearance is received, the participant is restricted to low intensity physical activity/exercise participation. This article outlines a form (i.e., the ePARmed-X+ Physician Clearance Follow-up) that assists physicians in the physical activity/exercise participation clearance process. This form is designed to expedite the clearance process for physicians further reducing the barriers to physical activity participation for those that serve to have the greatest benefits. **Health & Fitness Journal of Canada 2014;7(2):35-38.**

Keywords: Pre-participation screening, risk stratification, exercise, physical activity, chronic disease
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Introduction and Discussion

The health benefits of physical activity are irrefutable. At least 25 chronic medical conditions are associated with a lack of physical activity. Increasing physical activity is considered to be an important factor in effectively addressing the burden of preventable chronic disease in contemporary society (Warburton et al., 2010; Warburton et al., 2006).

There is clear evidence that the health benefits of physical activity far outweigh the small transient risks associated with exercise (Bredin et al., 2013; Goodman et al., 2011). Therefore, it is important to reduce the barriers to physical activity participation (Warburton et al., 2013; Warburton et al., 2011b). However, it is also prudent to ensure that it is safe for individuals to become more physically active. As such, various pre-participation screening strategies have been created and adopted throughout the world.

The original and revised Physical Activity Readiness Questionnaire (PAR-Q; (Chisholm et al., 1975; Chisholm et al., 1978; Gledhill, 2002; Thomas et al., 1992)) have been shown to be highly effective for pre-participation screening being used worldwide by millions and endorsed formally by varied international organizations (Warburton et al., 2011a). However, the purposely-conservative nature of the PAR-Q and its restrictions

based on age and chronic disease status have introduced significant barriers to physical activity participations for various groups (such as children, the elderly, and persons living with chronic medical conditions) (Warburton et al., 2011a). In the general population, the PAR-Q often excludes 10-30% of participants (Shephard, 1994; Warburton et al., 2011a). Higher exclusion rates (e.g., 55%) are often observed in those between the ages of 60-69 yr (Shephard, 1994).

Whitfield et al., (2014) recently compared physician referral rates using the American Heart Association/American College of Sports Medicine Adult Preparticipation Screening Checklist and the PAR-Q in a nationally representative sample of US adults (≥ 40 yr) from the National Health and Nutrition Examination Survey (2001-2004). The authors found that both widely adopted screening protocols led to marked physician referrals (94.5 vs. 68.4%, respectively) posing a significant barrier to physical activity participation for a large proportion of society (Whitfield et al., 2014). This high referral rate from the PAR-Q (i.e., 68.4%) is similar to that seen in other studies with primary care patients (Bull et al., 1999).

It is also important to emphasize that the original and revised PAR-Q forms were designed to be prohibitive for individuals with established chronic disease (particularly heart disease) referring many patients to a physician. This combined with the age restrictions and lack of questions related to other chronic conditions has led various agencies to question the risk stratification process for the facilitation of physical activity/exercise participation (Shephard, 2014; Warburton et al., 2011a).

The Physical Activity Readiness Questionnaire for Everyone (PAR-Q+) and the new online electronic Physical Activity Readiness Medical Examination (ePARmed-X+) were created specifically to address the limitations of the current PAR-Q. The creation of the PAR-Q+ and ePARmed-X+ risk stratification and pre-participation clearance strategy has been reduced greatly the barriers to physical activity participation, particularly for those living with a chronic medical condition and the elderly (Warburton et al., 2011a). For instance, we have demonstrated that the new strategy decreased significantly the number of individuals that were sent for medical referral in comparison to the revised PAR-Q (i.e., 0.8% vs. 15%, respectively) (Warburton et al., 2011a). The reliability of this instrument over a three-month period was also extremely high ($r = 0.99$) and with similarly high sensitivity (0.90 (95% CI = 0.77-0.96)) and specificity (1 (95% CI = 0.99-1)) for determining those with and without hypertension, respectively.

Everyone regardless of age, sex, or health status can use the new PAR-Q+ and ePARmed-X+. Through a systematic review and consensus panel approach the PAR-Q+ document (in paper and online versions) clears the vast majority of participants for physical activity participation (Bredin et al., 2013; Warburton et al., 2011a; Warburton et al., 2011b). However, certain individuals (that may be at an increased risk for an adverse exercise-related event) can be referred for further consultation with a qualified exercise professional and/or to the ePARmed-X+. The ePARmed-X+ is an easy to follow interactive program (www.eparmedx.com) that can be used to determine an individual's readiness for

increased physical activity participation or a fitness appraisal. Individuals who use the ePARmed-X+ have had a positive response to the follow-up questions on the PAR-Q+, or have been directed to the online program by a qualified exercise professional or another healthcare professional, owing to his/her current medical condition. Upon completion of the online ePARmed-X+, it is possible that the participant is advised to consult a physician to discuss the various options regarding becoming more physically active. In our experience, an extremely low proportion of individuals that complete the PAR-Q+ (i.e., less than 1%) are required to consult a physician. However, when this directive is provided the participant is required to receive medical clearance for physical activity from his/her physician. Until this medical clearance is provided, the client is not restricted from physical activity; however, he/she receives the recommendation to engage in low intensity physical activity/exercise until medical clearance is provided. In our experience, working with the new PAR-Q+ and ePARmed-X+ we recognized the need for a simple to administer clearance form that could be used by physicians. Accordingly, we created the ePARmed-X+ Physician Clearance Follow-up to assist physicians in the activity/exercise participation clearance process. It is the intention of this form to expedite the clearance process for physicians further reducing the barriers to physical activity participation for those individuals that likely serve to benefit the most from becoming more physically active.

The ePARmed-X+ Physician Clearance Follow-up form (see attachment from PAR-Q+ Collaboration) is a simple to use

document that is separated into three main sections:

- A. Background information regarding the clearance process.
- B. The history and demographic information for the client.
- C. The physician's recommendations regarding the client becoming more physically active.

From the physician's perspective, the process for using this form is relatively straightforward. The physician completes sections B and C of the document. This includes providing recommendations for physical activity participation based on the currently health status of the client (section C). Four recommendations are provided for the physician to select (see attachment). Moreover, the physician is able to provide recommendations regarding activities to include or exclude. At the end of the physician clearance process, the client is able to take the physician-signed clearance form to a qualified exercise professional or other healthcare professional before becoming more physically active or engaging in a fitness appraisal.

Conclusion

In conclusion, the ePARmed-X+ Physician Clearance Follow-up is designed to assist physicians in the physical activity/exercise clearance process. This form can be completed in a timely fashion, further reducing the potential barriers to physical activity participation.

Authors' Qualifications

The authors' qualifications are as follows: Darren Warburton, PhD, Veronica Jamnik, PhD, Shannon Bredin, PhD, and Norman Gledhill, PhD, FACSM.

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ePARmed-X+ Physician Clearance Follow-Up

This form is separated into three main sections:

- A) Background information regarding the PAR-Q+ and ePARmed-X+ clearance process,
- B) A brief history and demographic information regarding the participant, and
- C) The physician's recommendations regarding the participant becoming more physically active.

At the end of this process, the participant is recommended to take this signed clearance form to a qualified exercise professional or other healthcare professional (as recommended in the ePARmed-X+) before becoming more physically active or engaging in a fitness appraisal.

A BACKGROUND INFORMATION REGARDING THE PAR-Q+ AND ePARMed-X+ CLEARANCE PROCESS

The ePARmed-X+ is an easy to follow interactive program (www.eparmedx.com) that can be used to determine an individual's readiness for increased physical activity participation or a fitness appraisal. The ePARmed-X+ supplements the paper and online versions of the new Physical Activity Readiness Questionnaire for Everyone (PAR-Q+).

Individuals who use the ePARmed-X+ have had a positive response to the PAR-Q+, or have been directed to the online program by a qualified exercise professional or another healthcare professional, owing to his/her current medical condition. At the end of the ePARmed-X+, it is possible that the participant is advised to consult a physician to discuss the various options regarding becoming more physically active. In this instance, the participant will be required to receive medical clearance for physical activity from a physician. Until this medical clearance is received, the participant is restricted to low intensity physical activity participation.

This document serves to assist both the participant and physician in the physical activity clearance process.

B PERSONAL INFORMATION

NAME: _____

SEX: M or F

ADDRESS: _____

BIRTHDATE (mm/dd/yy): _____

TELEPHONE: _____

HEALTH/MEDICAL NUMBER: _____

REASON FOR REFERRAL (SELECT ALL THAT APPLY):

- QUALIFIED EXERCISE PROFESSIONAL REFERRAL
- HEALTH CARE PROFESSIONAL REFERRAL
- ePARmed-X+ RECOMMENDATION

C ePARmed-X+ PHYSICAL ACTIVITY READINESS PHYSICIAN REFERRAL FORM

Based on the current review of the health status of _____(name)
I recommend the following course of action:

- The participant should avoid engaging in physical activity at this time.
- The participant should engage in only a medically supervised physical activity/exercise program involving the supervision of a qualified exercise professional (or other appropriately trained health care professional) and overseen by a physician.
- The participant is cleared for intensity and mode appropriate physical activity/exercise training under the supervision of a qualified exercise professional.
- The participant is cleared for intensity and mode appropriate physical activity/exercise training with limited supervision (i.e., unrestricted physical activity).

The following precautions should be taken when prescribing exercise for the aforementioned participant:

- With the avoidance of: _____

- With the inclusion of: _____

NAME OF PHYSICIAN: _____

ADDRESS: _____

TELEPHONE: _____

Date of Medical Clearance (mm/dd/yy): _____

PHYSICIAN/CLINIC STAMP AND SIGNATURE

NOTE: This physical activity/exercise clearance is valid for a period of six months from the date it is completed and becomes invalid if the medical condition of the above named participant changes/worsens.