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## **Title**

Impact on quality of life of two emergency department care models for people presenting with a musculoskeletal disorder

## **Priority 1 (Research Category)**

Economic or policy analysis

## **Presenters**

Rose Gagnon, MPT, MSc, PhD(c), Jason Guertin, PhD, Luc Hébert, PhD, PT, Francois Desmeules, PhD, Simon Berthelot, MD, MSc, Kadija Perreault

## Abstract

Context. The addition of physiotherapists (PTs) to the emergency department (ED) is an emerging initiative aimed at optimizing patient flow through the ED. A number of studies have demonstrated that this care model has several benefits, such as increasing patient satisfaction towards care received and reducing healthcare resource utilization during and after the ED visit. However, no study has looked at its impact on patients' health-related quality of life. Objective. Compare the three-month change in health-related quality of life of people presenting to the ED with a minor musculoskeletal disorder (MSKD) and managed through two different care models. Study Design. Evaluation of health-related quality-of-life data captured alongside a prospective randomized clinical trial (NCT04009369). Setting. ED of the CHU de Québec - Université Laval (Quebec, Canada). Population Studied. People aged 18 to 80 presenting to the ED with a minor MSKD (n=56). Intervention. Management by a PT and an emergency physician (EP), or management by an EP according to standard practice. Outcome Measures. Qualityadjusted life-years (QALY). Participants' health-related quality of life was measured at the initial ED visit and at one- and three-month follow-ups using the EQ-5D-5L. Responses to the questionnaires were transformed into utility scores using the Canadian conversion algorithm for an adult population. Each participant's utility score was then transformed into QALYs. As recommended in economic guidelines, differences between scores were compared using the EQ-5D-5L minimal important difference (MID). Results. The utility scores of the two groups were almost identical at baseline ([Group: Mean, 95%CI] EP: 0.536, 0.421-0.651 vs PT and EP: 0.537, 0.427-0.646). At three months, utility scores were higher in the group managed by the PT and EP, but the difference was not clinically significant (MID: 0.074, [Group: Mean, 95%CI] EP: 0.784, 0.624-0.943 vs PT and EP: 0.852, 0.686-1.017). Participants managed by the PT and EP showed a gain of 0.069 QALYs after three months, compared with 0.062 for those treated in the usual way (mean difference: 0.017). Expected Outcomes. Management by a PT and an EP in the ED achieves a level of health-related quality of life that is at least as high as that of the usual care by an EP. However, further studies with a larger sample size are needed to confirm the results observed.