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Conference abstract

Implementation of a shared care guideline on the lumbosacral radicular syndrome: effects on unnecessary referrals, waiting time and costs

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Abstract

Purpose: To determine the effects of the implementation of the LRS-guideline in two regions in The Netherlands with regard to reduction of unnecessary referrals and duration of total diagnostic procedure. The effects were related to the cost of implementing the guideline.

Theory: The guideline

Although in The Netherlands GPs, physiotherapists and neurologists share the same guidelines regarding the conservative treatment of LRS, adherence turns out to be difficult. The main reasons are that patients exert pressure on the GP for referral, and that there is no collaboration between careproviders on the care given within a specific region. Due to these problems, GPs tend to refer LRS-patients within six weeks. As a result, unnecessary referrals take place, admission times for first consultation with a neurologist and MRI are extended as well as the duration of the total diagnostic procedure.

Methods: Implementation activities

We redesigned the care process in primary care and hospital by introducing a fast track procedure: if the GP/physiotherapist adhered to the LRS-guideline (i.e. conservative management in first six weeks) in turn the hospital guaranteed a priority consultation with the neurologist and for MRI after six weeks, if still necessary. In total 200 GPs, 250 physiotherapists and 20 medical specialists were involved.

A determinant analysis was carried out among GPs and physiotherapists. A multifaceted implementation strategy was developed that was tailored to the critical determinants.

Evaluation effect: In a pretest–posttest design the effects of implementing the guideline on unnecessary referrals and duration of the total diagnostic procedure were measured. The neurologists in each hospital registered all patients visiting the policlinic with symptoms of LRS; whether the patient was referred within six weeks having no indication (non-adherence), within six weeks having an indication (adherence) or after six weeks (adherence). In 2005 a pre-test took place, in 2006 a first post-test and in 2007 a second post-test to measure the continuation of the effects.

All hospitals registered the admission time as well as the duration of the total diagnostic process.

All costs associated with organising and actual implementation of the guideline were assessed using registration forms. Medical and non-medical costs (e.g. lost productivity) associated with a change in health care provision as a result of implementation of the guideline were assessed. Patients visiting the GP because of LRS kept a cost diary in the pre-test and second post-test period.

Results: The percentage of patients being referred within six weeks, with no indication, decreased significantly from 15% in 2005 to 9% in 2006 and stabilised on 8% in 2007. In one hospital, the duration of the total diagnostic procedure reduced significantly from 44 days in

2005 to 17 days in 2007, but increased to 33 days in 2007. However, the reduction between pre-test and second post-test was still statistically significant. In the other hospital, the total diagnostic procedure reduced significantly from 54 days in 2005 to 18 days in 2006 and stabilised on 24 days in 2007.

There was no difference between pre-test and post-test with respect to the patients' medical and non-medical costs. The costs of the actual implementation of the protocol were €21,500 per region.

Conclusions: It is possible to reduce unnecessary referrals in LRS-patients and the duration of the total diagnostic procedure hospital if health careproviders collaborate and if the implementation process is systematically designed. Effects can still be improved as half of the GPs did not refer the patient for the fast track procedure.

Keywords

implementation, guideline adherence, hospitals, primary health care, quality of health care, sciatica