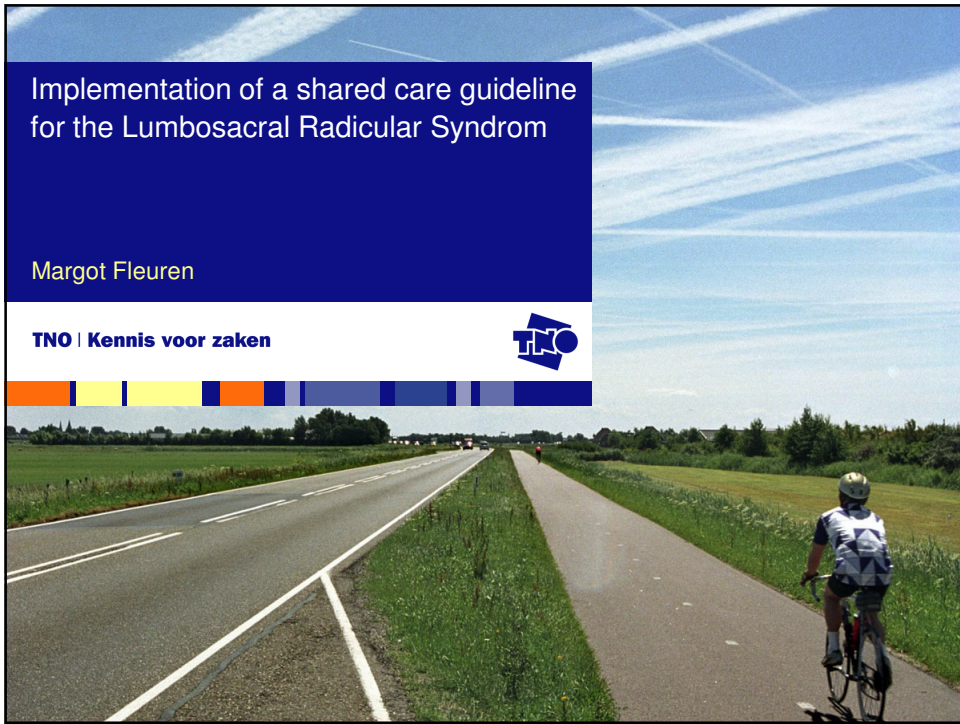


# Implementation of a shared care guideline for the Lumbosacral Radicular Syndrom

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TNO | Kennis voor zaken



## Lumbosacral Radicular Syndroom (LRS)

- Severe back pain
- Radiation to the legs
- Mainly caused by spinal disc herniation



## Guidelines for GP, physiotherapist, medical specialist

- Conservative management in first 6 weeks
  - No referral to neurologist
  - No magnetic resonance imaging (MRI)
- Treatment consists of:
  - Adequate pain management
  - Mobilising the patient



## Daily practice

- 15%-25% of patients referred in first 6 weeks
- Waiting times become longer for patients who require referral
- GPs unhappy with waiting times
- Patients demand referral
- Neurologist 'does not want to see' these patients



## Solution: shared care guideline

Two regions: Eindhoven and Helmond

- 2 hospitals: 9 neurologists and 18 radiologists
- 360 GPs
- 550 physiotherapists



## Trade-off

IF

GP complies with conservative approach in first 6 weeks  
(national guideline)

THEN

hospital guarantees a priority appointment after 6 weeks



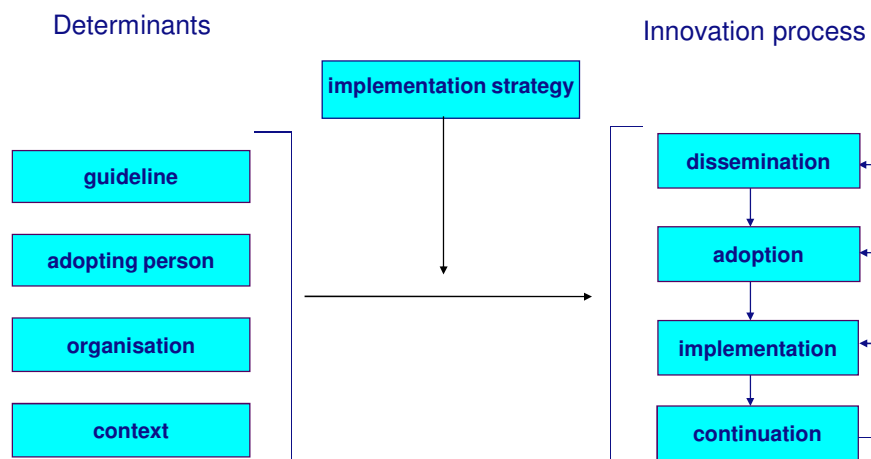
## Activities

- Redesigning the care process in hospital
- Implementation of shared care guideline among GPs, physiotherapists, neurologists, radiologists



## Innovation framework

(Fleuren et al., 2004)



## Determinant analysis: focus interviews

- Patient pressure on GP for referral
- Lack of coordination between care providers
- Pain medication in national guideline is too conservative
  
- All care providers will provide the same information
- Trade-off will alleviate patient pressure for referral



## Strategies

- Enhancing knowledge awareness
  - General meetings, personal letters
  - Patient information brochure
  - Information campaign for general public
  
- Enhancing adoption and implementation
  - Meetings with small GP and physiotherapist practices
  - Adaptations to prescription of pain medication



## Evaluation of effect of shared care guideline

- Unnecessary early referrals
- Duration of the total diagnostic procedure
  - days between referral GP and when neurologist makes final diagnosis
- Prospective registration by neurologists over period of 6 months
  - Pre-test in 2005
  - First post-test in 2006
  - Second post-test in 2007



## Trade-off

IF

GP complies with conservative approach in first 6 weeks

THEN

hospital guarantees a priority appointment with neurologist

LABEL PATIENT

as 'fast-track', otherwise standard procedure with standard waiting times



## Unnecessary referrals within 6 weeks

	Pre-test	1 <sup>st</sup> post-test	2 <sup>nd</sup> post-test
	n=178	n=224	n=321
All patients	15%	9% ▼	8% ▼

However, 50% standard referral instead of fast-track

	Pre-test	1 <sup>st</sup> post-test	2 <sup>nd</sup> post-test
Fast-track	15%	6% ▼	7% ▼
Standard	15%	11%	9%

▼ Significant decrease compared to pre-test

Shared care guideline LRS

GIN, 27 August 2010



## Total diagnostic procedure in mean days

	Pre-test	1 <sup>st</sup> post-test	2 <sup>nd</sup> post-test
All patients	50	34 ▼	45 ▼

	Pre-test	1 <sup>st</sup> post-test	2 <sup>nd</sup> post-test
Fast track	50	18 ▼	27 ▼
Standard	50	54 ▲	65 ▲

▼ Significant decrease compared to pre-test

▲ Significant increase compared to pre-test

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## Conclusion

- Implement a national guideline at regional level by introducing a shared care guideline with trade-off
- Reduces unnecessary referrals and duration of diagnostic procedure
- Short-term effects persist at two-year follow-up.
- Implementation can improve: 50% referred for fast track procedure

Fleuren et al. 2010: *Int J Qual Health Care* (Open Access)

