



TITLE: Delivery of Podiatry Care for Adults with Diabetes or Chronic Foot Conditions: A Review of the Clinical Effectiveness

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CONTEXT AND POLICY ISSUES

Foot problems such as foot ulcers are common complications of diabetes, with close to 85% of lower limb amputations due to diabetes in the US originating with foot ulcerations.¹ Successful treatment of diabetic foot issues include a combination of approaches such as optimal diabetes control, effective local wound care, infection control, pressure relieving strategies and blood flow recovery that usually require a multidisciplinary team approach, including podiatric care.^{2,3} Routine foot care may be provided by specialist physicians (podiatrists), non-specialists such as family physicians, or nurses or other allied health professionals. Nurses may receive additional foot care training, however there is currently no certification process for nursing foot care in Canada.

This report aims to review the clinical evidence of podiatric care for adults with diabetes or chronic foot conditions compared to care led by nurses, allied health professionals or non-specialist physicians.

RESEARCH QUESTIONS

1. What is the clinical evidence regarding the delivery of foot care by podiatrists compared to nurses or allied health professionals for adults with diabetes or chronic foot conditions?
2. What is the clinical evidence regarding the delivery of foot care by podiatrists compared to non-specialist physicians for adults with diabetes or chronic foot conditions?
3. What is the clinical evidence regarding the delivery of foot care by nurses or allied health professionals compared to non-specialist physicians for adults with diabetes or chronic foot conditions?

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KEY FINDINGS

No evidence was identified regarding the delivery of foot care by different health professionals.

METHODS

Literature Search Strategy

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2013, Issue 8), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2008 and October 3, 2013.

Selection Criteria and Methods

One reviewer screened the titles and abstracts of the retrieved publications, selected potentially relevant articles for retrieval of full-text publications for further investigation and evaluated the full-text publications for final selection, according to the criteria listed in Table 1.

Table 1: Selection Criteria

Population	Adults with diabetes or chronic foot conditions, or those no longer capable of caring for their own feet
Intervention	Foot care provided by a podiatrist Foot care provided by a nurse or allied health professional
Comparator	Foot care provided by a nurse or allied health professional Foot care provided by a non-specialist physician (general practitioner)
Outcomes	Quality of care, early detection of potential problems, infection, ulcer prevention
Study Designs	Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials (RCTs) and non-RCTs were selected for inclusion.

Exclusion Criteria

Articles were excluded if they did not meet the selection criteria in Table 1, if they were published prior to January 2008, if they were duplicate publications of the same study, or if they were referenced in a selected systematic review.

Quantity of Research Available

The literature search yielded 174 citations. After screening of abstracts, no potentially relevant studies were selected for full-text review. A PRISMA flowchart outlining the study selection process is presented in Appendix 1.

CONCLUSIONS AND IMPLICATIONS FOR DECISION OR POLICY MAKING

No evidence was identified comparing the clinical evidence of podiatric care for adults with diabetes or chronic foot conditions provided by podiatrists to care led by nurses, allied health professionals or non-specialist physicians, or provided by nurses or allied health professionals compared to non-specialist physicians.

Despite the lack of comparative evidence on the benefits of different care providers in the delivery of routine foot care, the positive impact of interdisciplinary diabetic foot care service including podiatric care was shown in a number of studies. The integration of podiatric surgery into an usual limb-salvage service (i.e. vascular surgery with medicine and allied patient care services) has been shown in a retrospective study to have positive impact on diabetic foot care, such as significantly reduced urgent surgeries, reduced below-knee amputation rates.⁴ In another retrospective study,⁵ the addition of a limb preservation team (LPT, which includes podiatric and vascular surgery, wound care nurse, orthotic laboratory, and research unit) was shown to decrease the rate of major amputations, and the rate of death in patients with diabetic lower-extremity ulcerations, as compared to the non-LPT group.

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APPENDIX 1: Selection of Included Studies

