Podiatry education to empower patients to self-care

Provided by: Community and Primary Services, Sheffield Teaching Hospitals NHS Foundation Trust

Publication type: Quality and productivity example

Sharing good practice: What are ‘Proven Quality and Productivity’ case studies?

The NICE Quality and Productivity collection provides users with practical case studies that address the quality and productivity challenge in health and social care. All examples submitted are evaluated by NICE. This evaluation is based on the degree to which the initiative meets the NICE Quality and Productivity criteria: savings, quality, evidence and implementability. The first 3 criteria are given a score which are then combined to give an overall score. The overall score is used to identify case studies that are designated as ‘recommended’ on NICE Evidence. The assessment of the degree to which this particular case study meets the criteria is represented in the summary graphic below.

Proven Quality and Productivity examples are case studies that show evidence of implementation and can demonstrate efficiency savings and improvements in quality.
Changes since the previous version

Published Quality and Productivity case studies are reviewed annually. One year after the case study has been published on the NICE Evidence website, the submitter of the case study is contacted to ask if there is further information relevant to the case study, and the case study updated as required. Any changes to this case study are outlined in the table below.

<table>
<thead>
<tr>
<th>Case study section</th>
<th>Update</th>
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<tbody>
<tr>
<td>Introduction</td>
<td>Added that patients are triaged electronically via SystmOne and that those eligible for self-care are given an emery board and information on where to purchase them.</td>
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<tr>
<td>Savings</td>
<td>No change</td>
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<td>Quality</td>
<td>No change</td>
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<tr>
<td>Evidence</td>
<td>No change</td>
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<tr>
<td>Implementation</td>
<td>Added that patients are triaged electronically via SystmOne and that those eligible for self-care are given an emery board and information on where to purchase them. This does not affect scoring.</td>
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Details of initiative

Purpose

To educate patients in podiatric self-care and enable some patients to be discharged from the podiatry service resulting in cost savings.

Description (including scope)

Many surveys have reported a high number of people suffering from foot problems. According to Farndon et al (2006) the type of foot conditions considered to be appropriate for patient self-care are small areas of callus or dry skin, thickened toenails or ‘normal’ nails which patients may be unable to cut easily as the nails may be hard and thick or they may have mobility issues.

One survey conducted in 1995 with independently living over 75s found that 96% reported having problems cutting their toenails.
(Crawford et al, 1995). Another survey in 1998 of the over 65’s found 29% reported thick nails and or skin problems on the feet (Munro and Steele, 1998).

There is evidence that many conditions that patients present with could be safely and appropriately handled by the patients themselves once they have the confidence, skills and knowledge.

Some of these common foot problems have previously required podiatry treatment from NHS podiatry services. Empowering patients or their carers to deal with their own minor foot problems (like nail care) reduces the burden on NHS podiatry services, and in turn saves money. This also allows NHS podiatry services to concentrate care on those with the greatest need and highest risks, such as people with diabetic foot problems for instance.

This project was designed to identify and train patients suitable for self-care, so they can be discharged from the service. This helped to ensure that podiatry care is targeted at those with the greatest need.

Patients suitable for self-care included those who do not have any high-risk medical or podiatric needs and who are fit and able to provide their own foot care, or who have a family member/carer able to provide it for them. Patients were triaged as high or low risk by a podiatrist as they enter the empowerment pathway. All new patients referred to core podiatry are triaged electronically (via SystmOne) and given an assessment appointment. Patients assessed as low risk and able to provide their own foot care safely were discharged to self-care with advice.

Initially those patients triaged to self-care were invited to attend an awareness session delivered by a podiatrist from the Empowerment team. Awareness sessions were provided in local health centres and up to 10 patients were invited to each. Patients were encouraged to bring a family member, carer or spouse with them if they were unable to carry out daily living activities for themselves. The awareness sessions covered the role of the podiatrists, the types of conditions that are treated by the NHS podiatry service and the types of common foot problems that can be self-managed. Training was also provided to patients at the awareness session on safe nail filing and leaflets were provided to reinforce the information. Time was available at the end of the session for questions and answers. Patients attending the sessions who revealed that they had a more serious foot problem or medical condition that had not been detailed in the original referral were regarded as having feet that were ‘at risk’. These patients were offered an assessment by the podiatrist.

Patients who meet the criteria for self-care were given a demonstration of how to file nails safely and any other foot care or footwear advice required, along with supporting literature. Patients were also given a large emery board and a list stockists so that they could purchase them easily in future. Patient foot care involves weekly filing of normal or slightly thickened toenails,
filing of rough or hard skin with a pumice or foot file and application of daily emollient creams when the skin is dry.

If the person’s needs changed (for example, they developed diabetes or their health or foot problems deteriorated), they could self-refer back to the podiatry clinic for a re-assessment.

**Topic**

Right care.

**Other information**

The first impact was noted within 4 months of implementation (from October 2000-January 2001) in the first group of patients assessed and benefits have continued since.

The priority criteria at the podiatry clinic at Sheffield teaching hospitals triaged all new patients into high or low risk. The podiatry team aimed to see high risk patients within 4 weeks of receipt of referral and low risk patients within 12 weeks.

The priority criteria were:

**High risk:**

- Diabetes with one or more of the following complications
  - reduced sensation to the feet
  - reduced circulation to the feet
  - a foot problem
  - unable to manage safe self foot care
- A history of non-traumatic amputation (lower limb), foot infection or foot ulcer
- Peripheral vascular disease
- Rheumatoid arthritis
- Neurological conditions causing reduced sensation to the feet
- Immuno-suppressed due to drug therapy or a medical condition
- Infected in growing toenail, infected lesion or ulceration
- Oral steroid therapy
- Individuals who did not have any high risk factors but had a foot condition which required treatment or advice from a podiatrist.

**Low risk:**

- Painful callus or corns
- Thickened and deformed nails, severely involuted (curved) nails which could not be self treated

Patients categorised as high risk were patients whose medical history or medication could put them at risk of developing potentially serious foot problems such as ulcerations, infections or amputations.

High risk conditions included diabetes with complications such as
reduced sensation or circulation to the feet or a history of lower limb amputation. Patients with a foot infection, foot ulcer, peripheral vascular disease, rheumatoid arthritis, a neurological condition causing foot desensitisation, the immuno-suppressed, patient’s with a infected in growing toenail or prescribed oral steroid therapy were also regarded as high risk.

Low risk individuals did not have any high risk factors but had a podiatric problem that required treatment by a podiatrist, such as painful and large corns or calluses.

### Savings delivered

| Amount of savings delivered | Savings result from enabling some patients to be discharged from the podiatry service to self-care. The savings are calculated to be £138,750 for a population of 560,000 (based on the GP List populations of Sheffield Primary Care Organisations) equating to £24,777 per 100,000 population.

The service has been rolled out nationally by other podiatry services across the UK. More patients have been seen per podiatrist than before the initiative began (the ‘Details of implementation’ section contains further information).

For every patient who can self-care, the service saves approximately £55.50 per annum which is the cost of a 40 minute assessment appointment (plus on costs) conducted by a Band 7 podiatrist. This saving is from the cost of an assessment appointment which was not needed for these patients as they were educated in a group and discharged to self care.

The service was able to discharge a total of 2500 patients, thus saving £138,750 per annum. The savings were a one-off and not annual. In the future non-priority patients will not be offered the service. This initiative is on-going and the large number of patients who had previously been placed on a waiting list have either been given on-going care or discharged to self-care.

| Type of saving | The service delivered a mix of both cash and productivity savings by educating patients to self-care which reduced the number of patients seeking help from the podiatry service. This was achieved by ensuring that care was directed at those with the greatest need. Capacity was therefore released by discharging low needs patients who may in the past have been managed by podiatry services. This allowed healthcare practitioners to focus on treating those with the greatest need.

Any costs required to achieve the savings | The cost of the associated training was estimated to be low. Training of staff was required but was done in-house at minimal
additional cost by an organisational psychologist and physiotherapist who delivered the one-off training session. Other podiatry staff could also contribute, so this was cost neutral.

The use of a psychologist and physiotherapist to train staff was suggested to other podiatry services who wished to adopt this initiative. If a suitable individual can be identified in the same, neighbouring organisation or university, other podiatry services may also be able to access training free of charge.

Staff training as indicated above should be given before the initiative is implemented to ensure that everyone has the correct skills and are confident and competent. This was not included in the costs assessed because it was performed in-house and involved one training day for all staff.

### Programme budget

**Other.**

### Supporting evidence

A regional benchmark exercise showed that before the self-care initiative began the service had higher numbers of patients per podiatrist than other comparable services such as physiotherapy or psychology.

There was a waiting list of approximately 3 years before the project began, because there was no spare capacity and very few people were discharged from the case load. In 2011/12, 400–500 new patients were referred to the service each month, 300–400 new patient assessments were carried out each month and around 70 people per month were discharged after an initial assessment to self-care. All high-risk referrals were seen within 4 weeks and low-risk referrals within 12 weeks. Just over 60% of new patient referrals were from high-risk groups (such as those with diabetes, peripheral arterial disease). Few re-referrals were seen such as were patients’ needs change and they became high risk (for example, they developed diabetes or had more complex foot problems). Details of the self re-referral rate was not available. This would have had implications if a significant number of patients had self-referred.

The total population of Sheffield was 560,000, the total caseload of the podiatry service was 20,000 and the whole service carried out approximately 50,000 treatments per year.

### Quality outcomes delivered

| Impact on quality of care or population health | This initiative allowed the podiatry service to concentrate resources on those with the greatest need without detrimental effects to patients discharged to self-care as they were able to manage their own simple foot care. Clinical quality was improved because there was more capacity in the system for patients with |

This document can be found online at: [www.evidence.nhs.uk/qualityandproductivity](http://www.evidence.nhs.uk/qualityandproductivity)
greater needs. Prior to this some patients with low needs were waiting up to four months in between podiatry appointments for routine nail care. If this treatment could be provided by the individual or a family member/carer, it can be performed more frequently.

Impact on patients, people who use services and/or population safety

No impact on patient safety.

Impact on patients, people who use services, carers, public and/or population experience

Patient satisfaction has been improved because all patients were assessed by a podiatrist and given one-to-one foot-care advice. Those patients who self-care felt empowered by the training. There was originally some dissatisfaction when all low risk patients were invited to an awareness session and discharged to self care which was highlighted in some follow up surveys and interviews. All new patients were given a one off assessment appointment which has improved satisfaction. This has been evidenced by the reduction in complaints.

Supporting evidence

Follow-up work after this initiative was implemented (survey and one-to-one interviews) found that patients on the empowerment pathway would have preferred a one-to-one consultation with a podiatrist to ensure they had understood the self-care education and were able to self-care or had a family member who could help them. This has led to a change in the pathway, in which all new patients are assessed by a podiatrist and an accurate view obtained of each patient’s ability to provide foot self-care.

• Safety: As the work has developed, the programme has changed to improve the assessment of patients’ ability to self-care and has therefore reduced the likelihood of poor self-care.

• Effectiveness: The work allows the service to take on more patients by involving those with minor problems in their own care.

• Patient experience: Supporting research has shown how to improve the patient experience in this work by widening the assessment process to include social and mental health factors.

Evidence of effectiveness

Evidence base for case study

### Evidence of deliverables from implementation

Example is based on the experience in the submitter’s organisation. The results have been published in the British Journal of Podiatry (Farndon et al, 2007).

### Where implemented

Sheffield Provider Services.

### Degree to which the actual benefits matched assumptions

Benefits matched assumptions because a large number of patients were discharged to self-care, freeing up capacity for quicker access to the service.

### If initiative has been replicated how frequently/widely has it been replicated

Although this initiative has been replicated in many other NHS podiatry services, the results or experiences have not been widely published and so it is difficult to provide evidence of the effectiveness in other centres or determine who delivered the training to their podiatry teams. Approximately 25% of podiatry services in the UK have contacted Sheffield Provider Services to find out more about this initiative with a view to local implementation.

### Supporting evidence

No further information provided.

## Details of implementation

### Implementation details

The empowerment project involved dedicated podiatrists, an in-house psychologist and physiotherapist providing free training to staff working in the podiatry service.

Staff were diverted from normal clinical duties. Staff trained in empowerment techniques offered training to other disciplines. This included a podiatrist demonstrating how to file toenails for individuals with reduced mobility. This training has been linked up with the rehabilitation physiotherapy team who provide education for people who have had or who are at risk of falls.

New patients were triaged. This now occurs electronically via SystmOne. Those not at risk were invited to empowerment sessions then discharged after tuition (with the opportunity to discuss problems on a one-to-one basis if required). Empowerment sessions consisted of a 30 minute presentation outlining the role of the podiatry service, the conditions that a podiatrist manages and the type of patients that are suitable for self-care.

For those patients of low medical risk who only require nail care, this was exhibited by a practical demonstration of safe nail filing using the equipment needed for this. How to manage other common foot problems safely at home, such as dry skin and small areas of callus were detailed. Advice was provided about the weekly filing of calluses with an emery board and the daily application of emollient creams. Patients were provided with a
large emery board and informed where to purchase them in future. There was an opportunity for questions during and at the end of the session.

If necessary, face-to-face assessments to confirm the decision were arranged.

A research study was undertaken to evaluate and refine the approach and the results indicated that patients preferred a one-to-one initial consultation. As a result of this research all new patients are now assessed by a podiatrist as in general, referrals are more appropriate.

The key steps to implement the initiative are to:

1. Assess the need for foot self-care in the local population
2. Involve the podiatry team in setting up a self-care service
3. Liaise with an occupation psychologist to help train the podiatry team in self-care techniques
4. Liaise with a physiotherapist to train the podiatry team in demonstrating nail filing for people with limited mobility
5. Arrange for a podiatrist to deliver an awareness session and training to patients identified as likely to be able to self-care
6. Evaluate the self-care programme via a patient satisfaction questionnaire
7. Provide information for referral to podiatry services if individual patients needs change.

Representatives from a number of podiatry services from across the UK have visited Sheffield podiatry services to gain further information about the initiative in order to implement the service locally. An annual Empowerment Conference was run for a number of years in Sheffield. Podiatrists and podiatry managers from other services attended to find out more about the initiative.

<table>
<thead>
<tr>
<th>Time taken to implement</th>
<th>Between 7 and 12 months after staff had been trained.</th>
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<tbody>
<tr>
<td>Ease of implementation</td>
<td>Affects one department or team. The psychologist and physiotherapist helped train the podiatrists, so it only affected one team.</td>
</tr>
<tr>
<td>Level of support and commitment</td>
<td>The initiative achieved good buy-in from key influencers because the cost of implementing the change is low.</td>
</tr>
<tr>
<td>Barriers to implementation</td>
<td>None provided.</td>
</tr>
<tr>
<td>Risks</td>
<td>Patient expectations were that everyone who applied to podiatry services received podiatry care, whether they had a podiatric need or not. Much of this care involved nail cutting, which</td>
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individuals are often able to do themselves or with the help of a family member. Some initial resistance was expected from patients as a proportion was unhappy as they expected that they would receive podiatry care within a clinic. This was dealt with formally by offering patients a second opinion for an assessment if they were unhappy and raised a complaint about self-care. All podiatry staff were given training on how to deal with difficult situations and managing change by an occupational psychologist.

**Supporting evidence**

It was important to include social circumstances and mental health considerations in the assessment process before determining whether an individual can safely self-care. It was also important to understand that when it is not clear that patients can safely self-care, they should be given professional treatment instead.

**Further evidence**

**Dependencies**

Staff training was given before the initiative was implemented to ensure that everyone had the correct skills and were confident and competent. This has not been included in the costs assessed in Gate 1 because training was performed for free in-house by a psychologist.

**Contacts and resources**

If you require any further information please email: qualityandproductivity@nice.org.uk and we will forward your enquiry and contact details to the provider of this case study. Please quote reference 12/0002r in your email.

Publications on this initiative:


Related NICE guidance:

NICE has published evidence based guidance for healthcare professionals on the care of people who fall into a number of the high risk groups identified in this case study. This case study goes beyond the scope of these guidelines. Links to the guidance have been included here for information and to support you in the development of evidence based services:


This guideline is supported by a NICE Shared learning example called A redesigned, GP commissioned NHS service model for the early detection, referral and management of peripheral arterial disease. This example shows how one trust is implementing the recommendations concerning information requirements, secondary prevention of cardiovascular disease, diagnosis and management from the guideline. Implementation is achieved through a podiatrist and nurse specialist led community based service for people with peripheral arterial disease.

National Institute for Health and Clinical Excellence (Sept 2005) Pressure ulcers: The management of pressure ulcers in primary and secondary care (CG29). London: NICE. This guidance was developed by NICE and the Royal College of Nursing indicating nurses are the main ones responsible for managing pressure ulcers. Podiatrists are not referred to but it looks like podiatrists may be responsible for helping manage pressure ulcers in the heel or foot.

National Institute for Health and Clinical Excellence (Mar 2011) Diabetic foot problems: Inpatient management of diabetic foot problems (CG119). London: NICE. This guideline concerns inpatient management whereas the case study is more focused on people in the community. However, if we are using the argument that this model will free up NHS podiatrist services for people at greatest need, those inpatient's with diabetic foot could be considered in need. The guideline specifically states that a podiatrist should be part of the multidisciplinary foot care team responsible for managing the care pathway of patients with diabetic foot problems who require inpatient care.

National Institute for Health and Clinical Excellence (Feb 2009) Rheumatoid arthritis: The management of rheumatoid arthritis in adults (CG79). Covers the care of adults with rheumatoid arthritis. This guideline specifically states that people with RA should have access to a podiatrist for assessment and periodic review of their foot health needs.
National Institute for Health and Clinical Excellence (Jan 2004) *Type 2 diabetes foot problems: Prevention and management of foot problems* (CG10). This guideline states that a podiatrist should be part of the multidisciplinary foot care team responsible for caring for the person with type 2 diabetes and a foot ulcer.

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