A systematic approach to achieving effective and comprehensive care for patients with diabetes
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For recipient's use
A systematic approach to achieving effective and comprehensive care for patients with diabetes

FOREWORD

HINST have chosen to prioritise this topic as one of their Masterclasses for the following reasons:

- It offers the potential to systematically improve the outcomes from evidence-based treatment of patients with potentially killer conditions on a scale that could enable the individual patient quality improvements to add up to a population-level change. Diabetes as a condition lies behind significant risk of macrovascular disease and mortality. There is a strong evidence base which demonstrates that secondary prevention through control of blood sugar, blood pressure and cholesterol can have an impressive impact on outcomes, as can modification of other risk factors such as poor diet, smoking and damaging alcohol use. Currently the full population-level outcomes of these measures are not being achieved because of patchy quality of their application.

- Specifically within the ‘Christmas Tree’ diagnostic (Figure 2) it addresses the following components:
  - Local service effectiveness (2)
  - Engaging the public (5)
  - Responsive services (9)
  - Supported self-management (10)
  - Balanced service portfolio (12)
  - Networks, leadership and co-ordination (13)

- Action in this area of work will help contribute to the Quality and Productivity Challenge (previously QIPP) by:
  - ensuring that full use is made of chronic disease registers to maximise the potential of effective and evidence-based primary and secondary prevention interventions to minimise ‘downstream’ pathology and high-cost management (e.g. strokes, heart failure; chronic renal disease; amputations; blindness)
  - bringing about whole-system working and linking primary and secondary care to reduce duplication and gaps in patient pathways
• Successful adoption of processes similar to those outlined here would demonstrate good use of WCC competencies:
  – PCT leadership of the local NHS (1)
  – Patient and public involvement (3)
  – Clinical leadership (4)
  – Stimulating provision (5)
  – Procurement and contracting (9)
  – Performance management (10).

BACKGROUND

One of the major areas for action identified is the systematic management of chronic disease, and ‘raising the bar’ on quality and the achievement of key outcomes. There is a very strong evidence base underlying the interventions, for example, to manage diabetes and its complications. When used to full advantage, these interventions can substantially reduce the risks to individuals e.g. for people with diabetes, the risks of major cardiovascular events, and complications such as blindness and renal failure.

Currently, however, in many areas, there are not so many of these individual reductions of risk that they will add up to a substantial percentage change at population level. The reason for this is that there are large variations in the quality of care provided to patients across PCTs and practices. In many areas there is insufficient systematic support to primary care, so that essentially it is every practice for itself in support of standards. For patients, this can mean it is a lottery as to the quality of care they can expect.

The introduction of the Quality and Outcomes Framework (QOF) in recent years has brought some of this variation out into the open. For example Figure 3 demonstrates that for the PCT in question, only approximately 30% (the blue segment in each practice bar) of patients have managed their blood sugar below the target level. It is apparent within this that there is substantial variation in the levels of treatment success, and also in the numbers ‘excluded/excepted’ from consideration for various reasons. These differences are not explained by consistent differences in the make-up of practice populations.

Another lesson from figure 3 was that although the local diabetes specialist services in this area had won awards for the quality of their care, but were completely unaware of the poor outcomes being achieved in their catchment population.
Figure 3: PCT QOF percentage of achievement of blood sugar target in diabetes registered patients, by practice

DM6 – % patients whose HbA1C <= 7.4 (measured in last 15 months)

This situation does not need to persist. Figure 4 shows the same measurements in another Spearhead PCT. This clearly has significantly higher levels of achievement, but there is also substantially less variation practice to practice. This is evidence of a systematic approach to support from the PCT and local specialist services.
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Figure 4: PCT QOF percentage of achievement of blood sugar target in diabetes registered patients, by practice

DM20 – % patients whose HbA1C <= 7.4 (measured in last 15 months)

The case studies described below illustrate the approaches taken by three different PCTs, with their networks of service partners, to address the variations in patient care and outcomes. The text offers highlights of the very rich presentations made at the Masterclass session. The full presentations will be available on the HINST website (www.dh.gov.uk/hinst).
CASE STUDIES

Wakefield Diabetes Service Re-design
The Diabetes Network in Wakefield has carried out a substantial piece of service re-design. It includes within its goals improvement in the clinical outcomes overall, together with a reduction in the variation in achievement across the district. The benefits to patients are being achieved rapidly, and this is being done with system and scale, and in a sustainable manner. The following is a summary of their Masterclass presentation.

Background to Wakefield
• two diabetes centres
• 40 GP practices
• one primary care trust
• single acute trust
• good relationships
• active diabetes network (since 2003)

Background to the re-design
• started with Professional Executive Committee meeting November 2006
• ensured it reflects national perspective/reviewed a range of models
• took into account local issues
• series of informal meetings/consultations
• patient focus group involvement
• information-gathering
• engagement of the Practice-based Commissioning Consortia

What the practices told us
(Survey and baseline self-assessment)
• training on insulin initiation and titration
• continual staff training and support
• support with new therapies and devices
• gradual discharge from hospital to primary care management
• better communication with specialist teams
• specialist team to support with complex cases in primary care
• education and training to manage stable type 1 patients
• email access to the specialist team
• specialist team would focus on their training, education and support
What the practices told us
(Survey and focus group involvement)
• access to good-quality care and continuity of care
• education (structured and quality assured)
• active participation in the care process
• support for self-management
• care that is co-ordinated

Resulting shared vision
• reducing variation across practices
• improving the quality of diabetes care
• addressing health inequalities
• structured and organised care
• education and competencies
• integrating primary care and specialist care

So what was our plan?
• Develop a joint action plan for each practice.
• It could mean monthly, two-monthly or quarterly visits:
  – complex case clinics delivered jointly by a consultant and a GP
  – on-site support for insulin initiation
• Attendance at joint clinics should be based on agreed referral criteria
• Practice-based education and training were integrated into clinical sessions.
• Commissioned by a new Local Enhanced Service (LES)

So what was our model?
• Diabetologist and diabetes specialist nurse were attached to a practice.
• Practice visits and joint working were used, depending on the level of service and their aspirations:
  – discuss the organisation of the current diabetes services at the practice
  – review the practice list of people with diabetes
  – agree an appropriate location of care for all patients
  – case note review (CNR) of patients
What it means for people with diabetes

- reducing variation in care/management
- improved equity of access
- access to the right health care professional at the right time
- swift referral to the specialist team, if required, and prompt intervention
- reduction in waiting times for appointments
- care closer to home
- structured education programmes being delivered in their locality
- potential for comprehensive patient-centred care planning
- increased patient/carer satisfaction

Other benefits

- Reduce/eliminate duplication of diabetes care by primary and specialist care.
- Increase understanding between primary and specialist care and their roles.
- Increase level of skills and knowledge in primary care.
- Offer chance to develop e-consultation.

Action plan

In the initial visit to each targeted practice:

- discuss the organisation of the current diabetes service
- review the practice list of people with diabetes

At the case note review:

- agree a management plan including location of care for all patients

At joint clinics:

- start joint review of patients in primary care – Specialist Primary Care Clinic (SPCC)

Specialist primary care clinic setup

- GP and diabetologist work together
- consultation led by GP
- reinforce the explanation of the reason for this visit
- patient ‘in charge’
- clear agreed plan of action (documented)
Surprises!
• chance to review (quality assure) specialist care
• identifying gaps in care, both in organisational terms and clinical care
• found major educational need for practice nurses and GPs
• original practice baseline self-assessment versus specialist teams assessment differences
• lack of capacity to deliver new model despite original enthusiasm

Challenges!
• changing mindset and culture
• consultant’s job plans?
• financial negotiations (PCT and trust)
• governance arrangements
• re-organising traditional ways of working
• evaluation of the whole pilot

Keys to success
• shared vision, leadership and purpose
• structured and organised administration
• multi-agency planning
• patient involvement (must)
• planning can be time-consuming so needs to be built in from start and the momentum driven to contribute to 2010 target.

Example practice results
• very good GP practice
• patient-centered diabetes care
• gains maximum QOF points

Practice data
• Total number of people with diabetes 438
• 58 patients with type 1 diabetes (13.24%)
• seven young people
• 380 with type 2 diabetes (86.75%)
• eight on Byetta
• 46 on insulin (12.1%)
• (9 >70 yrs of age)
• prevalence of people with HbA1c >10% is low (28/438 = 6.4%)

Comprehensive review of what happens in the practice
• Total number of people with diabetes 438
• 28 patients with HbA1c > 10%
• 43 patients with HbA1c 9.0–9.9%
• 74 patients with HbA1c 8.0–8.9%
• Patients < 8% reviewed by practice team

Total patients reviewed = 145/438 (33%)

Outcome of the case note review (patients with HbA1c > 10% (n=28))
• Five patients would remain in the routine primary care clinic.
• Eight patients needed to stay under the specialist diabetes service.
• Nine patients were scheduled to be seen in SPCC (joint clinic GP and consultant).
• One referred to specialist obesity clinic.
• One referred to hospital due to hypo-awareness.
• One referred to hospital due to complex issues (secondary diabetes/malabsorption/insulin treatment?).
• Three patients cared for in hospital: discussed at hospital Diabetes Multi-Disciplinary Team meeting.
Bolton Primary Care Trust Diabetes Services

Bolton PCT have been pioneers in the provision of innovative approaches to community-based diabetes services for a number of years. Wakefield Diabetes Network, for example, acknowledged drawing substantially on the Bolton model for its own service re-design.

Principles

- Some components of care are required for each patient.
- Some components of care are most appropriately delivered by primary care.
- Some components of care are most appropriately delivered by specialist care.
- Location of care must be the best to achieve the objectives of that care for that patient.
- All care for patients with diabetes is part of an integrated diabetes service.
- Integrated diabetes care requires integrated management.

Objectives of integrated diabetes care in Bolton

- fully integrated service
- avoid any gaps or duplication in service
- smooth and quick referral from primary care for advice and management plan
- increased specialist input into primary care settings
- consistent high-quality, patient-centred care

Visualisation of the challenge

The following figures represent the Bolton approach that they have used to help explain the vision to a variety of audiences. The images were found helpful by the Masterclass audience.

1. Define the current level of provision by practice.

The range of provision of diabetes care was classified into five levels of complexity, all of which it was possible to deliver in primary care given the appropriate level of knowledge and skills.

Each practice was assessed and assigned to a level, initially based on self-assessment, but subsequently validated by the specialist team.
2. Specialist care is deployed to complement primary care knowledge and skills.

If patients are not to be disadvantaged by the variable level of interest, knowledge and skills of their GPs, these would have to be compensated for by the deployment of specialist services. Commissioners will need to ensure that resources to provide the full service are deployed accordingly.
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3. The situation in Bolton in 2003 was assessed as being fragmented. Practice performance was very variable, and from a patient perspective there were gaps and uncertainties about clinical responsibility.

Figure 7: Bolton picture prior to 2003 changes
4. The strategy, therefore, was to systematise delivery

In order to fill the gaps in capability and capacity, plans were made to provide more specialist care alongside primary care in community settings, and to make referral into specialist care more straightforward.

**Figure 8: Improved integration: joint working between primary and specialist/secondary care prevents gaps in care and provides clear referral pathways**

![Diagram showing improved integration between primary and specialist care](image)

5. Through more integrated working, overall standards are being raised.

The accreditation and commissioning process provides incentives for practices to improve their standards and levels of delivery. At the same time, joint working with specialist medical and nursing colleagues and increased exposure to other specialist staff, e.g. dieticians, provide the means to train and improve ‘on the job’. This is particularly powerful when focused on joint assessment and management of complex patients.

By 2007 all practices were assessed as being at level 3 or above, with competencies continuing to improve.

The benefits to patients were immediate, with all having access to the full range of competencies from an early stage.
What does this mean for patients?

- complete care by adequately trained professionals
- local care
- consistent care
- access to specialist advice
- seen in most appropriate care setting
- involvement in planning and monitoring integrated care

Early lessons in developing and delivering integrated care for a population – diabetes

- takes time
- shared vision, leadership and purpose
- education, education, education
- devolved management and decision-making
- multi-agency planning – patient involvement
- external influencers
- Appropriate specialist care depends on a skilled primary care workforce.
- Recognise variation.
Northumbria approach to effective and comprehensive care for people with diabetes

As with the previous case studies, following a major review in 2000, Northumbria have moved to a comprehensive system approach with most of the clinical care taking place in the community. Primary care carries out most of the work, supported by the specialist team.

Outcomes of the new approach have been:

- Clear principles:
  - patient centred
  - empowerment
  - structured care across the system
  - teamwork
  - quality assurance, evaluation and monitoring

The model is outlined in Figure 10.

**Figure 10: The Cumbria Model**
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Figure 11:
A major emphasis is on patient-driven care.

What the health care system looks like for a person with diabetes

How a person with diabetes experiences care in reality

In order to transform the quality of holistic care for patients, the dynamic between patient and professional needs to change systematically.

Engaged, empowered patient

Organised, proactive system

Productive interactions

Based on the National Service Framework for Diabetes¹ and Wagner Chronic Care Model (USA)²
Although a large proportion of registered patients attend for an annual review, a Health Care Commission survey\(^2\) showed that only in the minority of cases do patients feel as though they have been involved in planning their own care for the next year.

Figure 12: Patient perceptions of involvement in their own care

![Graph showing patient perceptions of involvement in their own care]

The % of adults with diabetes (> 1 year) who report that they have had at least one diabetes check-up in the last 12 months.

The % who have had a check-up and report that at their check-up they ‘almost always’:

- …discuss ideas about the best way to manage their diabetes
- …agree a plan to manage their condition over the next 12 months
- …discuss their goals in caring for their diabetes

The Patient Year of Care approach looks to overcome this, bringing together patient-level (micro-) and service-level (macro-) commissioning. This approach is being pursued in Northumbria and Cumbria amongst others.

Figure 13: Commissioning at micro- and macro-level

Individual patient choices via the care planning process = micro-level commissioning

Menu of options (menu set by commissioner in collaboration with diabetes network)

- education
- weight management
- screening for complications
- telephone review
- smoking cessation advice
- local authority exercise programme
- specific problem-solving
- Expert Patient Programme (EPP)

Macro-level commissioning by the commissioner (PCT/practice) on behalf of the whole diabetes population

Commissioning at micro- and macro-levels
KEY MESSAGES

The case study presentations and participant input and highlighted some key learning in relation to tackling inequalities in diabetes care.

The aim of initiatives to tackle inequalities in diabetes care should be to reduce variation in primary care through joint understanding and ownership of the outcomes data by all partners in a patient’s care (including the patient).

The specialist service can play a key role in integrating primary and secondary care and prevent patients falling through ‘the referral gap’ and duplication of care.

A case notes review in all practices enables identification and targeting of specific patients for more intensive and coordinated care e.g. those with HbA1C > 10.

Accreditation of all practices to determine the level of diabetes care they are competent to provide can then identify and ensure that the patients of all local practices in an area then receive the additional levels of care required from specialist services (the Bolton model).

Every GP practice will benefit from a joint action plan, developed with the specialist service, and built around a shared vision and agreement on joint working between GP(s) and Diabetologists, which builds in experiential learning and patient engagement.

Re-design of LESs will facilitate the approaches outlines above.

Exclusions and exceptions should be regularly reviewed, and, although there may be sound clinical reasons, patient failure to attend should be considered a concern and should always be investigated.

Commissioners should consider negotiating a block contact (as opposed to a tariff system) from the specialist service(s) to enable flexibility and capacity to be responsive to evolving need and primary care development.

A taxonomy of practices (to group practices with similar patient/population profiles – see How to Guide on this whole topic) enables practices to compare themselves and improve within a comparable peer group.

Addressing health inequalities: health intelligence to support diabetes care

There was one further major contribution to the Masterclass. This did not take the form of a case study, but was a ‘masterful’ guide to the various sources of intelligence that can support work on health inequalities related to diabetes. The HINST ‘Christmas Tree’ diagnostic framework was used to illustrate sources of information that could support work across the whole programme, supporting optimal impact at population level.
Diabetes Health Intelligence is a strategic programme of the Yorkshire and the Humber Public Health Observatory, which provides national diabetes health intelligence.

The very useful signposting presentation can be viewed on the HINST website (www.dh.gov.uk/hinst), and the following contact details were given:

REFERENCES


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If you want more information on the examples contained in this guide please contact HINST on 0207 972 3377 or email hinst@dh.gsi.gov.uk