

National audit of diabetes:

why it matters to general practice

WHAT IS THE NATIONAL DIABETES AUDIT?

There are 30 national clinical audits in England, most of them solely in secondary care, where participation is mandatory. The National Diabetes Audit (NDA) is the major national clinical audit to include general practice. Data on 42 items of diabetes annual care processes and intermediate outcomes are collected mainly from primary care, but also from specialist services. This information is collated and reported annually in 'report 1'. There are national, clinical commissioning group (CCG), hospital, and individual practice level (from 2014–2015) reports.

In 'report 2' the NDA provides information on the number of diabetes complications, diabetes-related hospital utilisation, and diabetes-related mortality. It does this by using NHS numbers of individual people with diabetes to interrogate hospital episode statistics (HES) and the national mortality databases.

BENEFITS OF PARTICIPATION IN THE NDA

Practices that participate in the NDA get reports on how many people with diabetes in their practices are meeting National Institute for Health and Care Excellence (NICE) clinical guideline standards for diabetes care and treatment. Practices can assess how they are performing compared to similar practices throughout England or to local practices. Data are separated into type 1 and type 2 and where relevant case mix adjusted for the practice patient population to take into account age, sex, ethnicity, and socioeconomic differences from other practices. Benchmarking is therefore valid.

Participation in the NDA helps practices to identify priorities for improvement in diabetes care and to identify relationships between patient characteristics and care and or outcomes. This is only possible because the NDA uses individual patient data. Reports can therefore separate type 1 and type 2 diabetes, by age group and can look at 'bundled' care process or treatment achievements. Similarly, individual records enable day-to-day care to be linked to long-term diabetes complications and outcomes.

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data at general practice clinical meetings, can help the practice identify areas for improvement and suggest areas to test new systems or resource allocation. Evidence of this quality improvement can be used in appraisal submissions. It is one mechanism for improving the care experience and outcomes for people with diabetes.

The NDA is potentially a very rich source of data for researchers because of its size and scope. High participation levels are vital to safeguard this. There are continuing discussions by the NDA team about the mechanisms that need to be set in place to allow data access by researchers for secondary analysis. The implications for data confidentiality from the Caldicott report and the decision by the government on the future of care.data may also have implications for researchers seeking to use NDA data.¹

LEVELS OF PARTICIPATION IN THE NDA

The NDA started in 2004² and until 2013 the primary care component was permitted by the national Confidentiality Advisory Group (CAG) to work under an 'opt-out' model, in which every effort was made to collect practice data unless the practice chose to opt-out. Each year typically <1% chose to opt-out, although for technical reasons it was never possible to include every agreeable practice. NDA data have always been collected under section 251 of the Health and Social Care Act 2001, which means that it does not require individual patient consent.

In the NDA for 2011–2012 it proved possible for 88% of GP practices to participate.³ In 2012–2013 this dropped to 71% because of changes to the ease of data extraction and loss of primary care trusts (PCTs) that had often provided support;⁴ for the 'back to back' 2013–2014 and 2014–2015 collections when 'opt-in' created another layer of complexity and few CCGs were geared up to support participation fell further to 57% of practices.⁵ This drop-off in participation potentially reduces the validity of the audit by selection bias and through limiting the

validity of year-on-year comparisons.

Thus the drop-off in practice participation from 2011–2012 to 2012–2013 was attributed partly to technical data extraction changes, but primarily to the 'turbulence of the NHS reorganisation', recognising the supportive role that PCTs had previously played in primary care participation,⁴ especially the extent to which they could help practices overcome technical hurdles. In 2013 the CAG, the national body that governs national audit and major research data flows, required that the NDA move to an opt-in model. This major change imposed a new burden on practices who now had to take some form of action to opt-in before participating in the audit. Once the action was taken to opt-in it covered all the patients with diabetes in the practice for 2013–2014 and 2014–2015.

There were significant differences between the different GP clinical computer systems as to how easy it now was to 'opt-in'. Among the three major systems, one took just a couple of key strokes (System 1), for another it took around 20 minutes of work (EMIS), while for the third NDA data could only be submitted after Caldicott Governance and Open Exeter channels had been approved, followed by insertion of a disc into the server to extract data using MIQUEST enquiry software (VISION). It seemed as though this technical complexity might be the main reason for the opt-in associated participation fall.

INVESTIGATING THE FACTORS BEHIND THE DROP IN PARTICIPATION

The NDA team conducted a comprehensive investigation to discover exactly what had happened in 2014–2015. Participation in the NDA was therefore analysed by CCG, by GP clinical computer system, and by strategic clinical network.

There was notable variation in participation levels between CCGs. In 19 CCGs there was 100% practice participation, while three CCGs had no participating practices at all. Participation by strategic clinical network also varied significantly. In NHS South Central all 14 CCGs achieved

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>50% participation with 10 of its 14 CCGs achieving participation rates of $\geq 90\%$. NHS England South West and NHS England North, Cumbria and North East had low participation with over half of their CCGs achieving <50% practice participation.

Participation by GP clinical computer system was investigated by looking at the systems in use in the 19 CCGs that had 100% practice participation. It was found that among these CCGs 67% of practices used EMIS, 25% TPP (System 1) and 39% used VISION. TPP was the easiest clinical system from which to submit data; however, less than one-third of practices within CCGs with high participation use TPP. The highest proportion of non-participating practices overall were practices with VISION as their clinical system. Nonetheless one CCG achieved 100% practice participation using MIQUEST alone.

Feedback was also obtained from CCGs. CCGs with participation of <50% of practices were asked for perceived barriers to participation, while the 40 CCGs that achieved a practice participation rate of $\geq 90\%$ were asked what had been their routes to success. There was also an online GP practice survey which attracted participation from 334 GP practices.

Low participation CCG feedback included:

‘Practices having to opt in and register to submit data has had a profound impact.’

‘There is no financial incentive to participation.’

‘Practices are more reluctant to share data these days.’

High participation CCG comments included:

‘Ensuring NDA submission is part of the local GP quality contract.’

‘Giving Clinical Support Units (CSU) the responsibility of undertaking NDA, which needs to be funded by the CCG.’

The GP survey feedback stated that 44% said *‘Lack of resource within the practice to submit the data’*; 40% said *‘... there*

were concerns about submitting patient data without individual patient consent’; 32% said *‘... the process for submitting the data was too long and burdensome’*; and 28% reported *‘... no support from their CCG or CSU’*.

WHAT CAN BE DONE TO IMPROVE PARTICIPATION?

A number of suggestions to improve practice participation have been made for practices, CCGs, computer system suppliers, and for the NDA team.

For CCGs it is suggested that the NDA should be locally commissioned and a local NDA champion needs to be appointed. This will often be the CCG clinical lead for diabetes or long-term conditions. The benefits of participation to GP practices need to be communicated by the CCG and practical support offered to practices where needed.

At practice level it is important to appoint someone in the practice to take responsibility for submission. This will usually be the practice data or computer manager. It is important for practices to display the poster about the NDA in the practice, and to ask the CCG for help if this is needed.

There is also work to be done by the NDA team. Firstly, to allay the concerns of some by communicating the fact that because the NDA collection is and always has been covered by section 251 approval, individual patient consent is not mandatory. The NDA team is also working with system suppliers to do everything possible within governance constraints to make data submission more hassle free. Also the team will make the final results more easily accessible to practices.

CONCLUSION

We were expecting to find that the drop in participation was largely due to progressively more onerous technical and bureaucratic burdens. However, although this may have been part of the problem, the fact that those CCGs achieving 100% practice participation in 2014–2015 had a mixture of systems and that one CCG achieved 100% participation using MIQUEST alone, suggests that encouragement and support for participation in the NDA by CCGs is by far the most important factor in raising participation rates.

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REFERENCES

1. Caldicott F. National Data Guardian for Health and Care. *Review of data security, consent and opt-outs*. 2016. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/535024/data-security-review.PDF [accessed 8 Jul 2016].
2. The Information Centre, National Clinical Audit Support Programme. *National Diabetes Audit. Key findings about the quality of care for people with diabetes in England, incorporating registrations from Wales for health and social care. Report for the audit period 2004/05*. <http://www.hscic.gov.uk/catalogue/PUB02594/nati-diab-audi-04-05-full-rep.pdf> [accessed 8 Jul 2016].
3. Health and Social Care Information Centre. *National Diabetes Audit 2011–2012. Report 1: Care processes and treatment targets*. <http://www.hscic.gov.uk/catalogue/PUB12421/nati-diab-audi-11-12-care-proc-rep.pdf> [accessed 8 Jul 2016].
4. Health and Social Care Information Centre. *National Diabetes Audit 2012–2013. Report 1: Care processes and treatment targets*. <http://www.hscic.gov.uk/catalogue/PUB14970/nati-diab-audi-12-13-care-proc-rep.pdf> [accessed 8 Jul 2016].
5. Health and Social Care Information Centre. *National Diabetes Audit 2013–2014 and 2014–2015. Report 1: Care processes and treatment targets*. <http://www.hscic.gov.uk/catalogue/PUB19900/nati-diab-rep1-audi-2013-15.pdf> [accessed 8 Jul 2016].