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Implementing the South Auckland Diabetes Plan: barriers and lessons

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In November 1992, the South Auckland Diabetes Plan was launched.¹ Diabetes had hitherto been recognised as a major problem in South Auckland.^{2,3} The Plan, an attempt to stimulate local effort to meet the needs clearly defined by the South Auckland Diabetes Survey,⁴⁻⁶ was developed by a representative committee ('the South Auckland Community Diabetes Planning Group') and distributed to all local general practitioners (GPs) and agencies involved in the delivery of care to diabetes. The South Auckland Diabetes Project (SADP), with its diabetes research team, was established concurrently to address those activities unlikely to be undertaken by either general practice or secondary services.⁷ Immediately after the launch of the Plan, the New Zealand health reforms led to the local establishment of five different Independent Practitioner Associations (IPAs), the replacement of most of the existing hospital management and major changes in health promotion activities.

An economic evaluation of the Plan confirmed that its 'net benefits' were 'significantly positive'. An evaluation by the Ministry of Health and the Northern Regional Health Authority in July 1993 supported the implementation of the Plan and funding for the SADP.⁹ Plans for the Northern Regional Health Authority in 1996,¹⁰ New Zealand¹¹ and Otago¹² have been built upon that from South Auckland. At the time of the Plan, a referee of the paper¹ prophetically asked who would ensure implementation of the plan. It is timely to review the extent to which the Plan was implemented, barriers to that process and lessons learnt along the way.

Implementing the South Auckland Diabetes Plan

The Plan defined primary, secondary and tertiary prevention strategies to enhance quality of life issues, and reduce the growth in social and financial costs caused by diabetes. There were 68 recommendations grouped into 38 major recommendations: eight related to patient and community empowerment, nine to access to care, sixteen to improving coordination and standardisation of care and five to diabetes detection. Figure 1 summarises recommendations in the Plan, displaying which components were funded directly (at least in part) and which were implemented.

The South Auckland Health diabetes services established six new community clinics two to three years after the launch of the Plan and transferred a diabetes nurse specialist from the outpatient services to the wards. The former was associated with a reduced default rate (unpublished) and the latter with an improvement in inpatient diabetes care.¹³ The changes were unfunded and the delay was due principally to resistance to the move to more community based care by some staff, particularly the additional travelling, and the absence of additional resources required to service the need. Other notable, but funded achievements, were the expansion of podiatric and ophthalmological services in 1995 and 1998 respectively. However, no funding was available for the identified unmet dietetic needs (the inpatient service was in fact reduced) or for other diabetes staff (indeed, the total diabetes nurse specialist complement was also reduced).

Barriers to success: three critical failures

Financial constraints affecting patients and services, personal barriers to self care and the coordination/standardisation of care were revealed as key barriers to success.^{14,15} There were three major failures:

1. The failure to increase substantively the dietetic, education and medical time had a major impact on the ability to provide the care required.
2. The failure to address the personal costs of care¹⁶ reduced adherence to glucose monitoring and self-medication.
3. The failure to appoint a South Auckland wide coordinator of lifestyle programmes, provision of clinical care, information flow, a District Diabetes Advisory Group and the response to clinical incidents and complaints. This failure allowed duplication and gaps in care to continue.

The failure to introduce strategies to increase detection of diabetes in the wider community and during pregnancy is a reflection of the lack in population based coordination.

Empowering communities and patients: slow progress

After launching the Plan, the SADP attempted to maintain a representative 'Diabetes Advisory Council'. Attendance was patchy, and the group eventually folded after four years because of lack of authority and a working coordinator. The Mangere Diabetes Integrated Care Pilot Project¹⁷ included the establishment of a Manukau Diabetes Forum, a process initiated with support of the Manukau Counties Health Forum. This faltered due to a lack of funding and a perceived focus on Mangere.

One area of greater success was the development of community diabetes educator courses for Maori and Pacific Islanders. Over 30 individuals passed through the courses run jointly by the Manukau Institute of Technology, South Auckland Health, the SADP and the University of Auckland. Most participants are now in the health workforce (paper submitted). Unfortunately, funding for these courses has been withdrawn by North Health.

Information: partial success

The information aspects of the plan are increasingly being implemented. The SADP with regional health authority and pharmaceutical company support established the Diabetes Care Support Service.¹⁸ The experience gained was a major contribution to the recent Diabetes Health Information Project.¹⁹ The diabetes services in Auckland are now working together to develop diabetes clinical software tailored to the needs of the New Zealand situation. There had been an opportunity to create an integrated electronic diabetes record in primary and specialist care in Mangere, but local issues and privacy considerations delayed full implementation.

Coordination: the big fail

It is clear after six years that a major factor blocking implementation of the diabetes plan is lack of coordination.

	Implemented	Not Implemented
Funded	<ul style="list-style-type: none"> • Pilot Community based awareness/life style programme (2)^{SR} • Evaluate usefulness of targeting high risk groups^{SR} • Provide diabetes training to community based nurses^{HR} • Distribute targets for care to all GPs^{HRP} • Establish district wide diabetes audit (2)^{SRP} • Pilot methods to address reasons for default from care^{HR} • Build network of Maori/Pacific Island support groups^{SR} • Improve access to podiatry^{HR} • Introduce retinal photography^{HR} and introduce local retinal photocoagulation service^{HR} • Remove \$6 tax on glucose test^A • Improve support for GP based care^M 	<ul style="list-style-type: none"> • Coordinate an integrated approach to lifestyle(2)^M • Ensure Universal screening for gestational diabetes
Not Funded	<ul style="list-style-type: none"> • Develop tailored diabetes education materials^{SP} • Increased number Maori and Pacific Island diabetes workers^{HS} • Introduce inpatient Diabetes Nurse specialist service^H • Integrate South Auckland Diabetes Centre into services^H • Move diabetes clinics into community (2)^H • Develop and pilot patient carried notes^{SP} 	<ul style="list-style-type: none"> • Distribute patients' charter to all patients • Emphasise need to have one GP and to assure screening (3) • Fund a district diabetes coordinator • Offer all inpatients diabetes education before/after discharge • Provide an out of hours clinic and advisory service (2) • Fund 6 further community educators, 2 diabetes nurses, 2 dietitians, 0.1FTE diabetes specialist • Reduce patient out of pocket expenses • Introduce retinal photography in different sites (part of eye service recommendation) • Provide follow up for people with past GDM/IGT (2) • Pilot/evaluate screening days by GP/diabetes service • Maintain Diabetes Advisory Council (2)

Figure 1. Components of plan by implementation and funding status. Numbers in parentheses indicate the number of recommendations.

Key to providers and funders: (S) = South Auckland Diabetes Project; (H) = South Auckland Health; (R) = North Health; (M) = Mangere Integrated Care Project; (P) = Pharmaceutical industry support. Some components include more than one recommendation. GDM: gestational diabetes mellitus. IGT: impaired glucose tolerance.

The GP audit showed that local GP services were at least as good as those overseas.²⁰ Similarly, specialist services provided quality education and clinical care to those who attended within the resources available. Inpatient activities were also well ranked in the hospital roundtable (unpublished data). The problem is that activities are not linked, and the gaps of 1992 remain. The failure in coordination has been at two levels: at the level of provider organisations as already discussed, and at the patient level. At the patient level, many diabetic patients experience uncoordinated episodic primary and secondary care. A competitive model does nothing to improve this. Furthermore, coordination takes non-patient contact time, and this has not been specifically funded.

The need for protected staff time has been shown elsewhere.²¹ The appointment of clinical care coordinators is associated with an improvement in glycaemic control which can lead to a 60% reduction in complications.^{22,23} The role of these individuals is not only to provide clinical care, but also coordinate other components of their care and to observe targets and referral pathways (the standards referred to in the Plan). In the Mangere Project, this patient care coordination role was successfully refined through a joint consultation process,¹⁷ and the job termed 'Diabetes Care Promoter' (DCP). A DCP is a named diabetes clinician (eg GP, diabetes nurse specialist, podiatrist, specialist) who has time reserved for facilitating and coordinating all care delivered by the complete diabetes team. The individual is readily accessible, provides personal support, has health systems expertise and full access to all related health care information and is already involved in the care of the patient. The role had already been successfully introduced into the local Diabetes in Pregnancy services with a domiciliary diabetes midwife, and was associated with reduced admission rates, length of stay and improved glycaemic control (paper submitted). South Auckland Health is about to introduce the role for other patient groups at high risk. The Mangere Project is piloting such a role in general practice.

Primary prevention: time to implement

Although coordination of all involved in lifestyle and awareness programmes has not happened in South Auckland

(mainly because of the lack of funding for coordination and the imposition of the more competitive environment), many positive events have occurred. The Agencies for Nutrition Action group is attempting to coordinate projects on a national level. Both the SADP Pacific Islands Church programme and the Ola Fa'autauta Project^{24,25} have demonstrated that a structured and modular lifestyle programme can control weight in the Samoan community. A number of lifestyle interventions are underway but these are generally not integrated with the local general practice services nor with each other.

Conclusions

The South Auckland Diabetes Plan was based upon 'hard' local data relating to needs. It was devised by a group representing patients, the providers of care and the high risk groups in the community. Implementation of 20 of 38 recommendations was achieved by a number of enthusiastic individuals through lobbying and other activities. Many key clinical areas remain seriously underfunded; the personal costs of diabetes care and need for patient centred service delivery have not been addressed. We believe that the competitive purchasing model contributed to the difficulties in introducing such a coordinated approach to care. In essence, the Plan has not been implemented to the extent required, and five year follow up data (paper submitted) showed that between 1991/2 and 1996/7, glycaemia and blood pressure control have worsened. We strongly recommend that a needs and geographically defined population based approach to funding be introduced for diabetes care, incorporating specific district and patient coordination services. An outcomes monitoring system permitting national and international benchmarking should be established under the joint control of the key patient and clinician stakeholder organisations. Services provided to prevent diabetes complications need to be free or at minimal cost to the patient at the point of care. The key components of the Plan remain even more valid today than in 1992, and the financial and societal costs of not implementing the plan are increasing rapidly.

Acknowledgement. We thank the South Auckland Diabetes Project, North Health, South Auckland Health and the Health Research Council. We are grateful for the support of Professor Sir John Scott, Christina Tapu and the late Betty Hunapo for their guidance. Special thanks go to Barbara Gatland who gallantly managed the South Auckland Diabetes Project until 1999.

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LETTERS

Letters to the editor should be signed by all authors, typewritten in doublespacing, not exceed 400 words and 10 references. References should be in the Vancouver style. Over long letters may be shortened without reference to the author unless it is specifically stated otherwise. Priority of publication may be given to short letters.

Ethical responsibilities of doctors and managers

For a public sector health service to be successful, management and health care professionals must work together in a reasonably collegial way. Only then can the best health care be given within the limitations of available finance. This is stating the obvious, and that is why the article by Gillett is so disappointing (*NZ Med J* 2000; 113: 232-3). An opportunity has been missed to impartially assess the reasons for the failure of endoscopy cleaning at Christchurch and to examine any underlying ethical issues. Instead, we got an attack on management that continually referred to past events which I think are largely irrelevant to this recent problem.

The key issues in the failure of endoscopy cleaning that occurred in Gastroenterology at Christchurch Hospital are well known, following the investigation carried out by the Health and Disability Commissioner. Her report was issued on 9 September 1999 and is available on the Health and Disability Commissions Website (www.hdc.org.nz - click on opinions index 1999). It is astonishing that Gillett did not refer to this report or draw it to the attention of those reading his article.

Failure of endoscopy cleaning was noted on 27 April 1999 and was immediately corrected. There were no patients put at risk following that time. The issue faced by the Department of Gastroenterology and the administration was how this problem should best be handled. These decisions were not easy to make and required discussion within the organisation between clinicians and administrators, as well as seeking outside expert advice. The professional advice obtained differed with regard to the best course of action. These discussions involved the gastroenterologists, but unfortunately the surgeons, who also perform endoscopies, were not included. This was a genuine oversight which is no doubt regretted, but the daily supervision of the sterilisation of equipment is

often left to others. There were also good reasons to involve as few staff as possible in the early stages, as discussed below.

The discussions in May 1999 centered on what was the most appropriate course of action to take, and then how could this best be implemented. In other words, what was in the patient's best interests? It was decided to organise a complete recall of all patients through their general practitioner and have full documentation prepared for both patients and doctors. This was to ensure that patients and the profession were correctly informed as to the risks involved and the course of action proposed. This sequence of events is described in the Health and Disability Commissioner's report (1999).

In my view, this process appeared to work well. Patients were naturally very concerned, but there was no excessive or unnecessary anxiety, as this had been prevented by the provision of accurate written information. I was working in general practice at the time, and a number of patients in the practice received these letters and appreciated the way in which the matter had been handled. If the problem had simply been referred back to each of the referring consultants/endoscopists to do whatever they thought appropriate, I am sure chaos would have resulted. It might have avoided upsetting individual doctors, but it would certainly not have been in the patient's best interest because of the inevitable confusion and even hysteria that might have followed. It was equally important to make sure that nothing leaked out to the media prematurely, before plans to handle the problem had been completed. The decision to call all the patients back and test them on two occasions created a huge logistic problem. The wider the consultation within Canterbury Health, the more likely it was that the media would hear about the problem.

Professor Gillett could have examined a number of issues. These include why did the error occur? Was it a systems error? Was it the

error of an individual(s)? Was there some combination of the two? What was the appropriate response? Should nothing have been done because the risk was so low? Should one only test those endoscopy patients at particularly high risk? Or was it appropriate to test everyone, and if so, how often should it be done, once, twice or more?

The illogical aspect of Gillett's article was that it did not analyse any of the above complex issues, but assumed that it was a systems problem and assumed that it was related to the previous difficulties at Canterbury Health. These problems were outlined at length in the Stent report of 1998, the Stent report that Gillett did refer to! Many of the views expressed by Gillett have been described frequently in the press by the Christchurch Hospitals Medical Staff Association (CHMSA) and others, so we are already familiar with them. CHMSA did a great job in drawing everyone's attention to the issues which led to the 1998 Stent report. In my view, that report in effect backed what CHMSA had been saying, and severely criticised the Government, Ministry of Health, Canterbury Health, and in particular CCMAU. However, it is quite irrelevant to drag all this out again in the context of the failure of endoscopy sterilisation in Gastroenterology. You might even say that it was unethical to do so! Grant Gillett missed an opportunity to make some worthwhile observations from an ethicist's perspective, but unfortunately, merely used it as an excuse to berate Health Administrators without giving any justification for doing so.

Dr Michael Beard,
Christchurch.

(Dr Beard was asked to produce a report under legal privilege on the failure of endoscopy sterilisation by the Corporate Solicitor, Canterbury Health. Following consultation with Canterbury Health clinical staff, this report was completed in early June 1999).