



Wurli-Wurlinjang Diabetes Day Program

Evaluation Report

September 2011



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Acknowledgements

The evaluation team would like to acknowledge Dr. Tanya Martinich for producing the clinical audit data for this report. The team would also like to acknowledge Alexandra Walker- Health Promotion Coordinator for her assistance in performing this evaluation. Thanks also go to program staff and clients who contributed with great enthusiasm to completing the evaluation.

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Executive summary – Wurli-Wurlinjang Diabetes Day Program Evaluation Report

Type 2 diabetes has been recognised as one of the most important health problems for Indigenous populations across Australia, with the overall prevalence being 3.4 times that of the general population and its impact in terms of mortality and hospitalisation is even higher.

Indigenous Australians living in remote rather than non-remote areas were more likely to have diabetes (9% in remote areas, 5% in non-remote areas) (ABS 2006).

From the clinical records at Wurli-Wurlinjang Health Service it was concluded that over 66% of Diabetic clients are in need of more support to manage the condition. As a result of this the Diabetes Day program was started and commenced on the 31st of July 2008. The structure of the program logic is given in the table below.

Goal	To improve the wellbeing of clients with Type 2 Diabetes at Wurli-Wurlinjang Health Service through the creation of a supportive environment that promotes self-management and provides comprehensive care.
Purpose	To provide a culturally appropriate, sustainable, regular and holistic service for people with Type 2 Diabetes where empowerment is fostered.
Output 1	To support clients to improve the management of their Type 2 Diabetes and prevent complications.
Output 2	To support clients to improve the management of diabetes-related co-morbidities such as coronary artery disease, hypertension, dyslipidemia, obesity, renal disease and social and emotional issues.

The purpose of the evaluation is to:

- Measure the overall effectiveness, efficiency and appropriateness of the program as determined by achieving all objectives and contributing to the goal.
- Indicate the level of improvement the program has brought to the Diabetes Day Program participants.
- Ascertain the adaptability of the program for use by other health services.

Evaluation Framework

In developing an evaluation framework, program logic was used to examine the interrelationship between objectives. Program logic examines objectives for cause and effect relationships and hierarchically ranks the objectives. In this schema four levels of objectives are recognized namely: Goal, Purpose, Output, Activity.

In applying program logic an evaluation framework was developed to allow outcome, impact and process to be evaluated. Process is evaluated by noting how well the KPI's of sub- objectives and activities are met. Impact is measured by noting how well the KPI's

of objectives are met. If impact can be demonstrated then the correctness of the intervention logic is demonstrated. Similarly outcome is measured by noting how well the KPI's of the goal are met. If some measure of outcome can be demonstrated then the whole program logic is verified.

Sources of Data

Data to populate the evaluation framework was sought from the following sources

1. Wurli-Wurlinjang Diabetes Day program Staff
2. Wurli-Wurlinjang Clinical Staff
3. Clients of the Diabetes Day Program

Results

What level of improvement has the program brought to the Diabetes Day participants?

The evaluation of program outcome demonstrates a considerable improvement in social and emotional wellbeing and a small but significant improvement in clinical outcomes. There has also been an increase in capacity to control life events as summarised below.

Evaluation of outcome - Has the wellbeing of clients with Type 2 Diabetes at Wurli-Wurlinjang Health Service been improved, and what effect has this had?

The increase in wellbeing of clients has occurred in two major areas. Social and emotional wellbeing and clinical outcomes. There has been an improvement in the quality of life factors which have affected clients with type 2 Diabetes in a positive way.

These factors include, fostering social inclusion, creating a supportive environment, providing education to help clients understand and manage their condition, provide equipment and training to promote self management, and provide clinical services to monitor and treat clients where necessary.

From a clinical perspective there have also been improvements in the health status of clients. A clinical audit for the period 2010-2011 was performed by the resident GP who provides clinical services to the diabetes day clients. Over this period 118 clients with type 2 diabetes attended the diabetes day activity. With respect to clients on GP management plans (GPMP) there has been an overall improvement of 47.5%. and an overall improvement of Aboriginal and Torres Strait Islander Health Checks (ATSIHC) of 37%.

Control of blood sugar, blood pressure and cholesterol levels and weight are important outcomes of the program and there have been small but significant improvements here.

There has been an overall improvement in recording of HbA1c by 33% and an overall improvement of 10% of clients who were well controlled with HbA1c under 7.0. Clients reaching target BP of 130/80 over the audit period increased by 6%. The percentage of clients with cholesterol levels <4 improved by 14% for the clients that completed the 8 week course (>8 visits) while those who visited less regularly showed little change.

Evaluation of Impact – In what way is the service culturally appropriate, sustainable, regular and holistic? In what way has the service fostered empowerment?

This has been achieved through the creation of a supportive environment that promotes self-management and provides comprehensive care. The service has now been running for 3 years every Thursday since its inception (unless it coincided with a public holiday).

The advantage of this is that clients have a constant in their lives and they have stated that they appreciate having a dedicated day that doesn't change and they can rely on Diabetes Day always being available for them on Thursdays. Interviews with clients and staff indicate this program is both culturally appropriate and has fostered empowerment. Evidence for this is discussed in the appropriate section of this report.

Evaluation of Process – Were activities completed and to what standard?

The activities run in the program contributed to achieving two major outputs:

Output 1: To support clients to improve the management of their Type 2 Diabetes and prevent complications.

Output 2: To support clients to improve the management of diabetes-related co-morbidities such as coronary artery disease, hypertension, dyslipidemia, obesity, renal disease and social and emotional issues.

The clear and well designed program implementation plan together with good documentation indicated that on the whole activities were completed to an acceptable standard, and this was confirmed with client and staff interviews. However certain systems failures were highlighted concerning recall, medication compliance and education. These issues were able to be pinpointed and are now being addressed.

Is the Diabetes day program adaptable for use by other health services?

This program is highly adaptable to other health services and the clear program plan together with the evaluation would provide a good template to facilitate rollout by other services. This could further be improved by the development of a set of policy and

procedures to complement the program plan. This program is easily extendable to other chronic diseases.

Key Findings

- The Diabetes day program is an excellent concept highly acceptable to indigenous clients.
- Social and emotional issues are being well addressed.
- The medical staff and Indigenous health workers hold different perspectives and expectations of the program.
- The lack of a dedicated Diabetes Educator and Receptionist had a very negative effect on the effectiveness of the program.
- Driver attitude and understanding of cultural issues greatly affects the number of clients that will access provided transport.
- Clients are keen to learn from the education sessions but find a lot of the information presented confusing. Sessions that are informal, interactive, realistic and rely on examples and explanations rather than analogies are preferable.
- Formalising the training sessions for health workers on diabetes related issues would impact positively on the health workers and the program.
- Home medication reviews were found to be very helpful to the clients.
- Many clients of Wurli's main clinic are not accessing Diabetes Day either because there is a perception that it is for clients with a serious illness or they are just unaware of the program.
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Recommendations

- An effective recall system is implemented.
- A dedicated Diabetes Educator is employed.
- A dedicated receptionist and possible liaison officer is employed (documenting clients and related tasks such as taking blood samples to the lab takes up valuable health worker time that should focus on clients).
- Implement a system whereby attending clients who have been recalled or have abnormal readings are automatically checked in to see the doctor (follows from having a dedicated receptionist).
- Form a consultative team with presenters of education sessions to develop terms of reference to ensure education sessions are presented in the most effective way for the client group.
- Team meetings are held directly following Diabetes Day activities.
- Improve/extend outside meeting area so it is usable during wet weather.
- Provide job descriptions, policy and procedures documents for key staff to ensure program continuity in the face of staff turnover.
- Recommence home medication reviews.
- Accredited diabetes training made available for the health workers.
- Diabetes Day is actively promoted, particularly within the service.

1. Background

Type 2 diabetes has been recognised as one of the most important health problems for Indigenous populations across Australia, with the overall prevalence being 3.4 times that of the general population and its impact in terms of mortality and hospitalisation is even higher.

In 2004-05 The National Aboriginal and Torres Strait Islander Health Survey stated that diabetes (including high sugar levels) was reported by 6% of Indigenous Australians, and Indigenous Australians living in remote rather than non-remote areas were more likely to have diabetes (9% in remote areas, 5% in non-remote areas) (ABS 2006).

From the clinical records, 296 regular clients at Wurli-Wurlinjang Health Service were identified as Diabetic, of these 99 clients were well-controlled, 56 having a HbA1c between 7 and 8 and 134 clients being poorly controlled (>8). This means that 66.55% of Wurli-Wurlinjang's Diabetic clients are in need of more support to manage the condition.

As a result of this the Diabetes Day program was started and commenced on the 31st of July 2008. The program has been running every Thursday morning at Strongbalawan-Wurli's healthy lifestyle and education centre lately re-named Gudbinji. It is a collaborative program planned, developed and implemented by Chronic Disease Program, Regional Renal Coordination Program and Health Promotion Program. The Diabetes Day team has included a GP, AHW, Diabetes Educator who was also the Renal Nurse, an RN and a Dietitian who is also a Health Promoter. The days are planned for any absences of the cited team members. Since April 2009 the team has grown with one female and one male AHW, one female and one male CLO and a second Doctor. The structure of the program logic is given in the table below.

Goal	To improve the wellbeing of clients with Type 2 Diabetes at Wurli-Wurlinjang Health Service through the creation of a supportive environment that promotes self-management and provides comprehensive care.
Purpose	To provide a culturally appropriate, sustainable, regular and holistic service for people with Type 2 Diabetes where empowerment is fostered.
Output 1	To support clients to improve the management of their Type 2 Diabetes and prevent complications.
Output 2	To support clients to improve the management of diabetes-related co-morbidities such as coronary artery disease, hypertension, dyslipidemia, obesity, renal disease and social and emotional issues.

This framework allowed the program to be evaluated in terms of process, impact and outcome. This effectively provides answers to the questions:

1. Were all activities completed to an acceptable standard (process)?
2. Did the activities achieve the desired objectives (impact)?
3. Did these effects contribute to the overall goal (outcome)?

If the above questions are answered positively then the program achieved what it intended and was effective.

This is fundamental to fulfilling the Terms of Reference of the evaluation which are to:

- Measure the overall effectiveness, efficiency and appropriateness of the program - determined by achieving all objectives and contributing to the goal.
- Ascertain the adaptability of the program for use by other health services.
- Indicate the level of improvement the program has brought to the Diabetes Day Program participants.

2. Purpose of the Evaluation

The purpose of this evaluation is to:

- **Firstly** Measure the overall effectiveness, efficiency and appropriateness of the program- determined by achieving all objectives and contributing to the goal.
- **Secondly** Ascertain the adaptability of the program for use by other health services.
- **Thirdly** Indicate the level of improvement the program has brought to the Diabetes Day Program participants

For the purpose of the evaluation the program is regarded as the sum of the three objectives above. If the objectives are demonstrably achieved then the program has been effective.

3. Evaluation Methodology

In developing an evaluation framework, program logic was used to examine the interrelationship between objectives. Program logic examines objectives for cause and effect relationships and hierarchically ranks the objectives. In this schema four levels of objectives are recognized namely: Goal, Purpose, Outcome, Activity.

In applying program logic the following evaluation framework was developed to allow outcome, impact and process to be evaluated. Process is evaluated by noting how well the KPI's of outcome and activities are met. Impact is measured by noting how well the KPI's of purpose are met. If impact can be demonstrated then the correctness of the intervention logic is demonstrated. Similarly outcome is measured by noting how well the KPI's of the goal are met. If some measure of outcome can be demonstrated then the whole program logic is verified. The evaluation framework is depicted below and will be seen to have an extra column to the left of that entitled goal. This column relates the analysis of the health problem to the structure of the intervention. Hawe, Degeling and Hall (2002) give the following relationship which has been used in the evaluation framework.

Relationship of Goal, Objective and Sub-Objective to analysis of health problem		
Goal	<i>Corresponds to</i>	Health Problem
Objective (Purpose)	<i>Corresponds to</i>	Risk Factor
Sub-Objective (Outcome)	<i>Corresponds to</i>	Contributing Risk Factor

How this relates to the program is shown in the table below

Health Problem	High morbidity resulting from Type 2 Diabetes	Goal	To improve the wellbeing of clients with Type 2 Diabetes at Wurli-Wurlinjang Health Service through the creation of a supportive environment that promotes self-management and provides comprehensive care.
Risk Factor	Clients unaware of how to address this issue	Purpose	To provide a culturally appropriate, sustainable, regular and holistic service for people with Type 2 Diabetes where empowerment is fostered.
Contributing Risk Factor	Clients unable to act on advice	Output 1	To support clients to improve the management of their Type 2 Diabetes and prevent complications.
Contributing Risk Factor	Clients unable to act on advice	Output 2	To support clients to improve the management of diabetes-related co-morbidities such as coronary artery disease, hypertension, dyslipidemia, obesity, renal disease and social and emotional issues.

4. Evaluation Framework

Narrative Summary	Key Performance Indicator	Means of Verification	Focusing Question
Goal: To improve the wellbeing of clients with Type 2 Diabetes at Wurli-Wurlinjang Health Service through the creation of a supportive environment that promotes self-management and provides comprehensive care.	Number of clients with improved wellbeing as indicated by improved management of Type 2 Diabetes and improved management of co-morbidities	Interviews with clients Examination of clinical records	Has the wellbeing of clients with Type 2 Diabetes at Wurli-Wurlinjang Health Service been improved? What effect has this had?

Purpose: To provide a culturally appropriate, sustainable, regular and holistic service for people with Type 2 Diabetes where empowerment is fostered.	Number of clients in the program with improved health outcomes and confidence in self management. Number of clients in the program that feel the program is holistic and culturally appropriate.	Interviews with clients Examination of clinical records	In what way is the service culturally appropriate, sustainable, regular and holistic? In what way has the service fostered empowerment?
Output 1: To support clients to improve the management of their Type 2 Diabetes and prevent complications.	Number of clients supported to improve management of Type 2 Diabetes as defined by completion of activities below:	Program records. Semi structured interviews with clients and staff.	In what way have clients been supported to improve management of Type 2 Diabetes?
Activity 1 Produce a Diabetes Diary for each client.	Number of diaries in use	Interviews with clients regarding diabetes diary – diaries seen .	Are diabetes diaries in use – are they effective in improving self management?
Activity 2 Set-up of a self-management area to monitor blood glucose level, blood pressure, weight and waist circumference.	Self management area ready for use upon client arrival	Records of setup and use of self management area	Is the self management area set up?
Activity 3 Train clients in self-management and discuss results collected and recorded with them.	Number of clients able to able to collect and record own results Number of clients able to discuss results.	Records Survey	Are clients able to effectively use self management are and discuss their results?
Activity 4 Increase uptake of insulin use and blood glucose level home	Increase uptake of insulin use and blood glucose level	Record of Number blood glucose level	Has the uptake of insulin use and blood glucose level home

monitoring.	home monitoring from x to y or z%.	monitors sold. Survey of number in use.	monitoring kits been increased and by how much?
Activity 5 Facilitate healthy food selection, preparation and cooking by clients.	Number and frequency of participants attending food preparation and cooking course.	Questionnaire	Has healthy food selection, preparation and cooking by clients been facilitated?
Output 2: To support clients to improve the management of diabetes-related co-morbidities such as coronary artery disease, hypertension, dyslipidemia, obesity, renal disease and social and emotional issues.	Number of clients supported to improve management of the following diabetes-related co-morbidities: 1 coronary artery disease 2 hypertension 3 dyslipidemia 4 obesity 5 renal disease 6 social and emotional issues.	Analysis of data provided by activities listed below	In what way have clients been supported to improve the management of the following diabetes-related co-morbidities: 1 coronary artery disease 2 hypertension 3 dyslipidemia 4 obesity 5 renal disease 6 social and emotional issues.
Activity 1 Plan and run an eight week education program.	Plan completed Number of clients attending the program	Records of program attendance Program evaluation?	Has the education program been planned and run?
Activity 2 Provide shopping tours for clients upon request.	Number of shopping tours requested cf. those held.	Records of tours	Have shopping tours been provided on request?
Activity 3 Provide medical care through Adult Health Check, GP Management Plan and appropriate referrals to Allied Health professionals.	Number of clients with a complete GP Management Plan and /or Adult Health Check. Number of referrals triggered to different Allied	Report produced from the medical IT system.	Has appropriate medical care been provided?

	Health services.		
Activity 4 Streamline medications through Meditechs and Home Medication Reviews.	Number of clients on Meditechs. Number of clients with a completed Home Medication Review.	Report produced from medical IT system.	Has the use of Meditechs and Home Medication Reviews streamlined medications?
Activity 5 Facilitate healthy food selection, preparation and cooking by clients.	Number and frequency of participants attending food preparation and cooking course.	Questionnaire	Has healthy food selection, preparation and cooking by clients been facilitated?

5. Sources of Data

Data to populate the evaluation framework was sought from the following sources

1. Wurli Wurlinjang Diabetes day program Staff
2. Wurli Wurlinjang Clinical Staff
3. Clients of the Diabetes Day Program

The level of data type of data and focusing question for each source is summerised below

Level		Type	Focusing Question
Outcome	Goal	Interviews with clients Examination of clinical records	Has the wellbeing of clients with Type 2 Diabetes at Wurli-Wurlinjang Health Service been improved? What effect has this had?
			<ul style="list-style-type: none"> Define wellbeing and describe how the wellbeing of clients with Type 2 Diabetes at Wurli-Wurlinjang Health Service been improved.
Impact	Purpose	Interviews with clients Examination of clinical records	In what way is the service culturally appropriate, sustainable, regular and holistic? In what way has the service fostered empowerment?
			<ul style="list-style-type: none"> This should largely be answered by a combination of the answers to output 1 and 2
Process	Output 1		In what way have clients been supported to

			improve management of Type 2 Diabetes?
			<ul style="list-style-type: none"> Do the following activities constitute good support for diabetes management? The answers should be formulated from the answers below.
	Activity 1		Are diabetes diaries in use – are they effective in improving self management?
		Staff	<ul style="list-style-type: none"> What is the purpose of the diabetes diaries/ How do they improve self management? Is this a good support mechanism?
		Clients	<ul style="list-style-type: none"> In what way do the diaries help in self management? Is this a good way to support your self management?
	Activity 2		Is the self management area set up? – some description of the setup – how often etc.
		Clients/Staff	<ul style="list-style-type: none"> Do you think the self management area is appropriate for Aboriginal clients to use. Explain why?
	Activity 3		Are clients able to effectively use the self management area and discuss their results?
		Staff	<ul style="list-style-type: none"> What training has been given to clients? How effective has this been? To what extent are clients able to discuss results?
		Clients	<ul style="list-style-type: none"> Are you able to use the equipment in the self management area? What do you understand about the meaning of the results? Has this helped you to take control over the management of diabetes?
	Activity 4		Has the uptake of insulin use and blood glucose level home monitoring kits been increased and by how much?
		Staff	<ul style="list-style-type: none"> What measures were taken to increase the uptake of insulin use and blood glucose level home monitoring kits? To what extent has this been effective?
		Clients	<ul style="list-style-type: none"> Do you use a home monitoring kit? Why did you decide to use/not use

			<p>one?</p> <ul style="list-style-type: none"> Do you find it useful?
	Activity 5		Has healthy food selection, preparation and cooking by clients been facilitated?
		Staff	<ul style="list-style-type: none"> Describe how healthy food selection, preparation and cooking by clients have been facilitated. How successful was this?
		Clients	<ul style="list-style-type: none"> In what way has this course helped in controlling your diabetes/ Do you feel more “in control” as a result?
	Output 2		<p>In what way have clients been supported to improve the management of the following diabetes-related co-morbidities:</p> <p>1 coronary artery disease 2 hypertension 3 dyslipidemia 4 obesity 5 renal disease 6 social and emotional issues.</p>
			<ul style="list-style-type: none"> Do the following activities constitute good support to improve the management of the diabetes-related co-morbidities listed above? The answers should be formulated from the answers below.
	Activity 1		Has the education program been planned and run?
		Staff	<ul style="list-style-type: none"> Describe the eight week program List attendances In what way has this been un/successful?
		Clients	<ul style="list-style-type: none"> Did you attend any or all of the sessions? Why did you not/attend any of the sessions? What did you find not/useful? Do you feel more “in control” as a result of the sessions?
	Activity 2		Have shopping tours been provided on request?
		Staff	<ul style="list-style-type: none"> Have clients requested shopping tours? Has this been successful? Discuss reasons?

		Clients	<ul style="list-style-type: none"> • What do you know about the shopping tours? • Are they easy to request? • Have you been involved? • Are they appropriate/useful?
	Activity 3		Has appropriate medical care been provided?
		Clinical Staff	<ul style="list-style-type: none"> • What is the number and percentage of clients that have undergone Adult Health Checks and/or on GP management plans? • What is the number of referrals triggered to different Allied Health services? • What has been the effect of the above on patient outcomes?
			<ul style="list-style-type: none"> • Do you feel that your medical care is handled in culturally appropriate way? • Can you explain this?
	Activity 4		Has the use of Meditechs and Home Medication Reviews streamlined medications?
		Clinical Staff	<ul style="list-style-type: none"> • Describe how the use of Meditechs and Home Medication Reviews streamlined medications?
	Activity 5	Already completed under output 1	Has healthy food selection, preparation and cooking by clients been facilitated?

6 Results

What level of improvement has the program brought to the Diabetes Day participants?

The evaluation of program outcome demonstrates a considerable improvement in social and emotional wellbeing and a small but significant improvement in clinical outcomes. There has also been an increase in capacity to control life events. These improvements are discussed below.

6.1 Evaluation of outcome – did the purpose contribute to achieving the goal?

Q Has the wellbeing of clients with Type 2 Diabetes at Wurli-Wurlinjang Health Service been improved, and what effect has this had?

In this instance the increase in well being of clients is the increase of quality of life factors that affect clients with type 2 Diabetes in a positive way. These factors include, fostering social inclusion, creating a supportive environment, providing education to help clients understand and manage their condition, provide equipment and training to promote self management, and provide clinical services to monitor and treat clients where necessary.

Social and emotional aspects

The following quotes by members of staff demonstrate the positive aspects of the program which have improved the quality of life for clients attending Diabetes Day.

As one staff member commented:

I think the whole thing, just that social and emotional wellbeing, the quality aspect of it, people really like it, people love coming in and hear people talking about it “oh we’ve got Diabetes Day and we’re looked after so well there’, and it’s really good, and they’re all so happy and positive and that side of things is really good, the social aspect of it is really good.

Another staff member also observed:

..... the clients get so involved in it and I think that’s wonderful, and when you go into the kitchen and there’s the females that have done it and they take over and don’t need much direction, so the education they’ve got coming to Diabetes Day has enabled them, even if it’s just once a week, to cook a healthy meal for a group of people, and that in itself is an achievement. So I think that’s wonderful.

The location of the program was enthusiastically remarked on by another staff member:

I think the building is fantastic, I think it’s a really good place to have Diabetes Day in, it’s a great feasible structure for it. I think the patients really like it, I think they enjoy it for all that non-clinical perspective, and having a positive, functional, social interaction and associating with relatively more functional people and more happy people is really positive.

One staff member felt that the sharing information fostered social inclusion between the clients and reflected:

The lovely thing about that little self-training area was that many of the older clients, or the ones that were most used to it, would train the newer clients in how to do it – and that was a nice little outcome, in fact some of them probably did better, and that’s probably the way to go really is to get

some of the clients, who have learned what to do and how to do it, to be training the others, if the relationships are all fine between them.

Clinical aspects

A clinical audit for the period 2010-2011 was performed by the resident GP who provides clinical services to the diabetes day clients. Over this period 118 clients with type 2 diabetes attended the diabetes day activity. The program works on an eight week cycle and 28% of clients completed the whole course. With respect to clients on GP management plans (GPMP) there has been an overall improvement of 47.5%. and an overall improvement of Aboriginal and Torres Strait Islander Health Checks (ATSIHC) of 37%.

Control of blood sugar, blood pressure and cholesterol levels and weight are important outcomes of the program and there has been small but significant improvements here. There has been an overall improvement in recording of HbA1c by 33% and an overall improvement of 10% of clients who were well controlled with HbA1c under 7.0. Clients reaching target BP of 130/80 over the audit period increased by 6%. The percentage of clients with cholesterol levels <4 improved by 14% for the clients that completed the 8 week course (>8 visits) while those who visited less regularly showed little change. It should be noted that the percentage of clients with well controlled cholesterol attending diabetes day is 31% higher than the percentage of well controlled clients in the whole of Wurlli-Wurlinjang's entire diabetic population. Weight control has been more problematic and while there has been an improvement of 45% in recording BMI's only the clients having recorded visits of 8 or more showed any significant BMI change and clients reaching the target BMI of <25 was 6%.

Overall there has been good improvement in the completion of both GPMP and ATSIHC and the recording of clients' clinical key performance indicators. Less good was the improvement in the number of clients with well controlled diabetes hypertension and lipids and this discrepancy can be accounted for by suboptimal systems within diabetes day and patient factors. The predominant failure has been the lack of a chronic disease recall system which was the result of not having a dedicated CD nurse and admin support. This is currently being addressed.

6.2 Evaluation of Impact – did the activities have the desired effect?

Q In what way is the service culturally appropriate, sustainable, regular and holistic? In what way has the service fostered empowerment?

A This has been achieved through the creation of a supportive environment that promotes self-management and provides comprehensive care.

Regular

The service has now been running for 3 years on a weekly basis and so far 156 sessions have been run. The Diabetes Day program has run every Thursday since its inception on the 31st July 2008 unless it coincided with a public holiday.

The advantage of this is that clients have a constant in their lives and they have stated that they appreciate having a dedicated day that doesn't change and they can rely on Diabetes Day always being available for them on Thursdays.

Staff felt that the regularity of Diabetes Day has played an important part in the success of the program. As one staff member noted:

..... and the routine is important, and to keep going and to have it every Thursday, it doesn't matter what, we never shut, it has to be a public holiday for us to be shut.

This was corroborated by another staff member who remarked:

So keep it consistent so eventually everyone knows about it, that was very good I'm glad we did that that we had it every Thursday regardless.

Sustainable

Financially the program is dependent on ongoing funding and the sustainability is vulnerable to funding cuts. The program is dependent on competent staff and while having run successfully for 3 years has had setbacks due to staff issues. The sustainability issue is ongoing and a systems approach is being taken in the form of developing policy and procedures and job description documentation to ensure best practice developed as a result of this evaluation is followed.

Staff problems in the past have included the lack of a receptionist for a short while, during which time one of the Aboriginal Health Workers covered this job in addition to their own duties. This resulted in limited time for patient education, client flow being slowed down with some clients not accessing the doctor.

A diabetes educator has not always been available during the 3 years duration of the program. This is an essential role when starting clients on insulin as noted by one GP:

Since the diabetes educator left looking after the people on insulin is really difficult I think, and getting people started on insulin, is really difficult. I don't have time to start people, spend two hours educating one patient about insulin on Thursday. I can start the ball rolling and try to get them to come back in another day, they usually don't. So it's very

hard, and then some people we get started on, yes we need a diabetes educator for that desperately, really desperately.

Currently there is only one doctor that attends Diabetes Day this puts time constraints on consultations who may have to see up to 20 patients during a three hour period. As one doctor revealed:

I can't see 20 patients or 22 patients in three hours, when all of those people are needing realistically, people new patients to the clinic are needing an hour appointment each so people aren't getting the time spent with them that they need to have spent with them they don't want to come in other days to the clinic because they've already come in to Diabetes Day, they've already been at the doctors for 3 hours this week, why would they want to come in another day.

There have also been problems with the recall system due to staffing problems which for some time has not been functioning but is now in the process of being fixed. Having a dysfunctional recall system and follow-up system makes it difficult to ensure all clients are receiving appropriate medical care. As one staff member reflected:

If you haven't got a recall system or a functional follow-up system then you've got all these people that are coming in that aren't seeing the doctor when they should be seeing the doctor and we are not getting them to come in other days.

Fortunately most of these concerns are currently being addressed.

Holistic

For the purpose of this program holistic is taken to mean providing services and support beyond the clinical. Therefore in addition to clinical services, health education is supplied and training and equipment to facilitate self monitoring.

The Gudbinji clinic provides a supportive, non-threatening environment for clients to learn how to self-manage their diabetes. In addition to a clinical service the program provides training in self-monitoring, a comprehensive health education program and participation in the preparation and cooking of healthy meals. There are two Aboriginal Health Workers - one male and one female - who are on hand to train and assist clients with their self-checks. There is usually an educational DVD playing for clients in the reception area who are waiting to see the health worker or the doctor. The setting is welcoming and relaxed with clients chatting and involving themselves in the various activities.

As one staff member remarked:

I think the whole thing, just that social and emotional wellbeing, the quality aspect of it, people really like it, people love coming in and hear people talking about it “oh we’ve got Diabetes Day and we’re looked after so well there’, and it’s really good, and they’re all so happy and positive and that side of things is really good, the social aspect of it is really good.

And another pointed out:

I think the building is fantastic, I think it’s a really good place to have Diabetes Day in, it’s a great feasible structure for it. I think the patients really like it, I think they enjoy it for all that non-clinical perspective, and having a positive, functional, social interaction and associating with relatively more functional people and more happy people is really positive.

All the clients interviewed, enjoyed and appreciated the location of Gudbinji, where Diabetes Day is held, and do not want the program to move back to the main clinic. As one client stated:

Yeah it’s just grown too big and if we had to move from here to over there where are they going to put their staff and where’s the kitchen going to be over there?

Staff are also concerned that the location of Gudbinji may change as noted by one staff member:

They’ve been trying to get us out of here to go back to the main Wurli, but we put our foot down as I like it here, I didn’t like it over at the main clinic because they had two small rooms that’s all we had.

However, due to the number of people there on Diabetes Day, clients feel more space is required as it becomes quite crowded on busy days. One client suggested that:

Out there where Debbie sits (self-management area) it should be extended out and that little patio outside extended out a bit more too. So that it would be a lot roomier because we’re all squashed and when people come in they’ve got to cut through.

And another client stated that:

I’d like to see a bigger area, even if they like put a tarpaulin here,(self-management area) where you can sit outside in the wet season, this would give more room inside as well, as we’re all squashed up and that, can’t move.

The self-management area is set-up outside in the attractive garden area of the clinic. This provides a good space for Indigenous people to interact with the staff and each other. New clients are trained by the health workers in the use of the self-monitoring equipment and shown how to record their measurements in their Diabetes Diary that they are given on their initial visit.

The healthy food selection activity takes part in the kitchen where rostered clients prepare a healthy cooked lunch for the rest of the Diabetes Day participants.

Before lunch is supplied education sessions are provided by various presenters on health issues relevant to diabetes health care such as healthy eating, foot care and physical exercise.

Fostered empowerment

The main aim of Diabetes Day is to foster empowerment by supporting clients in managing their diabetes. The self-management area was set up to enable clients to perform their own measurements and recordings using the equipment available and with the support, training and assistance from the health workers.

When clients arrive at Diabetes Day, generally the first thing they do is to go straight to the self-management area and retrieve their Diabetes Diary in which they record their observations.

These diaries are used as a tool to enable the clients to record their observations and gain an understanding of that these observations mean. The diaries enable the clients to self-manage their diabetes by increasing their awareness of the issues surrounding diabetes and in giving them some control over the disease.

As expressed by one staff member

It gives them a bit of ownership also because the diary belongs to them, not us. We just look after them.

However there are some concerns regarding clients understanding the concept of the diary or of its contents. For clients whose understanding of English is limited and who are operating in a second language the diaries may be difficult to negotiate. As one staff member revealed:

They'll write their blood pressure here, because they know there is some sort of thing that we'll require, sometimes they'll put the blood glucose level in the weight.

Overall the concept of the diaries is a good one as they are a good information and education tool. Clients also report that they find them useful and are generally very positive about them.

The diaries are currently being reviewed to make them more culturally appropriate.

Self monitoring is considered one of the most important aspects of Diabetes Day and clients take it very seriously. They report that using the equipment, taking the measurements and writing these down makes them feel more in control of their diabetes.

As one staff member commented:

I think the clients get a lot of satisfaction of checking their own observations, 'oh yeah, I thought I was bad but now I'm a beautiful 7.5". Self-management is a big thing – because that's what they show up here for.

In theory this is an excellent concept and works well for long-term clients who are literate and able to interpret their observations.

However, as previously mentioned, many clients have low literacy and numeracy skills and depend on the health workers to do the measurements and recordings for them. Due to time constraints it is often easier for the health worker to take over rather than instruct the client on what to do. As clients attend on a random basis it is difficult for staff to know at what level the clients are at in their understanding of self-management.

As one health worker disclosed:

Like I said a lot of them are semi-illiterate and can't read and write properly so I write a lot of stuff for them. Some people I still do everything for them, because they just can't catch it, but the mere fact that they are here is not an indictment on their self-management it's the mere fact that they even arrived here is the biggest statement.

And commenting further:

"..... because I also have manual cuffs here and a stethoscope if I've got the time I'll check them but we're trying to get through 15 – 20 people in a 4/5 hour period, it gets really hectic out here."

It is important that information is reinforced on a regular basis to help clients remember and understand concepts not familiar to them. As one staff member commented:

I think that some of the really basic stuff needs to be gone over again, you know "what is diabetes?", " what is a good sugar to have", "why it's important to have blood sugars under 12???", "what is high blood

pressure”, “why it’s important to have blood pressure” all those types of things, that really simple, simple, knowledge I think really needs to get really put through a bit more.

And reflected further:

.....it really needs to get pounded through to every single person that comes through, what things targets are, why it’s important that you meet these targets, you know that you’re going to get renal disease, heart attacks, stroke, what the outcome of this is. This needs to be repeated by all the staff they see.

Access to home monitoring kits has been facilitated by giving them to users free of charge. Staff have encouraged and supported clients who need to take insulin. Clients who originally didn’t feel ready to go on insulin are now taking insulin and feel confident enough to use a home monitoring kit to regulate their insulin effectively.

With better access to these kits it appears there has been a substantial increase in the uptake of insulin and kits as evidenced by the following staff worker:

We give people, and I’ve given out 60 – 80 of those during the time I was at Wurli, certainly there was an increase in uptake, because it was driven again. There were about 20 – 30 clients that were on insulin out of a client base of 250 I think or nearly 300, that’s probably nearly 10% on insulin that’s an increase of 100% from ten to now thirty.

The home monitoring kits have proved effective but once again this mainly relates to clients who understand how to use the machines and the concept behind self-regulating.

The development of confidence within the supportive environment has fostered “empowerment” beyond that of self-management. For example when a few of the long term female clients heard that the Diabetes Day program might be closed down. The ladies became highly concerned, so got together, did some research and made a petition by hand. This was despite the fact that some of the clients could not write but struggled to somehow get their name on the petition. The outcome was that the program continued.

The aim of the education program is to inform clients of the ways in which they can manage their diabetes and therefore improve their lifestyle. These have worked well when a facilitator has been available but were reduced from eight sessions to three whilst the facilitator was absent. The program is being reviewed and two additional sessions will be added to the program.

The education sessions are well attended and appreciated by the clients who appear keen to learn more about their diabetes. Most of the clients interviewed found the sessions very useful and informative and feel they have given them more control over their diabetes.

A few clients have indicated they would like the sessions to be more regular, so they don't forget information and to be more explanatory. When asked if he wanted sessions to be more in-depth one client responded:

Yes to get more understanding, talk about different things and I just sit there and think I'll wait until she comes back and gives us another session, because the sessions are too far and few between. Some just show pictures and all that, they don't explain it properly, need more input into it. Some of them are really good and they'll come back in another fortnight to follow up. But as soon as they go everyone forgets what they were talking about, until they come down next time. We need them on a more regular basis like 3 times a week.

Also it was felt that more time was needed for asking questions to gain a fuller understanding of the subject matter as one client mentioned:

They've got a set time, which is only for one hour, which is not long enough, especially when you've got a big mob of clients, there's a lot of questions that they want to ask and they're going that fast through them, slow it down and wait until they finish, give them time to think about it, by that time they're on to the next questions..... so we need longer sessions.

It is felt that a different approach may be needed when presenting education sessions. Comments and suggestions by clients are detailed in the section below on Culturally Appropriateness.

One of the most popular activities at Diabetes Day is the healthy food selection activity mentioned above which consists of clients cooking a healthy meal for that day's lunch.

Originally the facilitator carried out most of the organizing and cooking but as clients have become more, motivated, confident and skillful (particularly long-term ones) they have become more involved in the whole process. This has been the result of empowering the clients through the provision of education sessions on healthy eating and supporting and encouraging them to take over various tasks. Clients state their eating habits have changed since coming to Diabetes Day and learning about the dangers of eating too much salt, sugar and fatty foods.

Healthier food habits have been further reinforced by the introduction of Food Label Cards by the Nutritionist which indicate the amounts of fat, sugars, fibre and sodium you need to be aware of when buying food. Teaching clients how to read food packages was introduced as an alternative to the shopping tours which were trialed at the beginning of the Diabetes Day program but proved too onerous to continue.

Most clients interviewed said they knew what ingredients to be cautious of and were now buying healthier foods. Some clients have found the food label cards handy and had

passed these on to their friends and relatives. One client was proud that she had been able to help her son-in-law, who also has diabetes, in this way.

The social aspects play an important part in fostering empowerment. One of the staff members who felt the social support is really good for the clients told the story of one client who was a long term client but irregular in her attendances due to a dysfunctional lifestyle. She was not complying with her medication and was in quite a bad state.

With the support of the group she was able to turn this around and with the help of the police sorted out her domestic issues. After stabilizing her domestic situation she resumed her medications and started to come along to Diabetes Day again. Gradually her appearance, observations, and motivation improved. Her drinking stopped and her blood pressure which was extremely high returned to normal

Some of the long term clients are now feeling confident enough to ask questions of the staff when they feel they have not understood something and are encouraging the less confident clients to ask more questions. (See quotes on culturally appropriateness).

Long term clients are also feeling confident in passing their knowledge on to less experienced clients and assist them in their self-management. As the following staff members note:

.....and sometimes clients help other clients which is wonderful too,they are so happy to coach other clients and that happens quite regularly, and I think that is more self-management than the diary as a tool itself and it shows much more empowerment than the exercise itself.

The lovely thing about that little self-training area was that many of the older clients, or the ones that were most used to it, would train the newer clients in how to do it – and that was a nice little outcome, in fact some of them probably did better, and that's probably the way to go really is to get some of the clients, who have learned what to do and how to do it, to be training the others, if the relationships are all fine between them.

Culturally appropriate

The location is ideal for Indigenous people who generally enjoy being outside and not confined to one space.

This was evidenced by clients' responses when asked what they liked about coming to Diabetes Day. Most clients enjoyed sharing their stories as one client revealed:

To listen to what people talk about, sit down and talk to others, share stories.

For some it was a good place to be as one client commented:

It's a good fun place to come.

Clients also felt the social inclusion was really important with one client remarking:

It's like family, we are all family here.

Looking after yourself was an important aspect for most clients as expressed by one client:

It's good to look after yourself, sometimes family they don't look after us properly – they too busy or whatever and so I bring myself here on Thursday and check my sugars and blood pressure it is good.

And another client responded:

I like coming as it helps me look after my diabetes better and I like to meet others and the staff.

Clients particularly enjoyed the social side of the program and found it extremely supportive and beneficial to their well-being. When asked what they thought of the social side of the program the responses were as follows:

It's good, like to listen to other's stories, have a laugh, everyone's friendly.

I enjoy this part, everyone's friendly.

I really enjoy the social part and being able to talk to others about diabetes.

The social part is really good – when we meet people in the street before we would just walk past but now they are interested in if you will be attending Diabetes day. Yeah we talk to each other outside the program.

When clients were asked if they thought the program was culturally appropriate, most clients responded positively. An important aspect of the program was feeling welcomed by the staff and other clients: As one client remarked:

Well and truly, the staff are nice and make you feel welcome, feel safe, you can talk, laugh and joke with them.

This was confirmed by another client:

Yes, it's good for us to come here, staff talk really good to us. I like sharing talk with other people that come.

And observed by another client:

Doctors are good, they listen

And another:

Yes you don't have to wait long

One client, who felt the program was highly appropriate, would like to see similar programs offered in other towns:

Yes it's good they should have one in Alice, Tenant Creek and Darwin. We all go visiting these places and there's nothing like this to go to. It's sad.

The opportunity to share with other people experiencing similar problems appears to have a huge positive effect on these clients.

Although the education sessions were well attended and much appreciated by clients a few of the clients felt these needed to be reinforced as it was easy to forget what they had learned. One long term client felt that some of the clients, particular new ones, often didn't understand the information being presented, but felt too shy to ask any questions. When asked how he thought the sessions could be improved he made the following suggestions:

....each question they ask (the clients) they should (presenters) keep explaining about that question until everyone gets it into their head. Presenters need to listen to people's stories, so they understand us more.

And also:

People presenting the program they don't speak slow enough and they talk too fast and people just nod their heads, yeah, yeah, but they're not really getting it.

Another long term client who has become confident in asking questions of staff and presenters has this suggestion for less experienced clients:

Yeah and I think everybody should do that (ask questions when they see a doctor) just to satisfy themselves. And if they've got to go for an operation, ask all the questions, if you don't know write it down

beforehand and take it with you, because they'll say 'have you any questions' 'yeah I do have a lot of questions to ask you' and if you don't want to talk about it just pass the list over to them and they can explain.

An important point made by a few of the clients, who wish to understand their diabetes more fully, is for explanations by staff and presenters to be more detailed and clear when using unfamiliar terms. Also to be practical and realistic in their expectations of what clients can achieve i.e. some clients want to buy fresh health food but come up against obstacles as one client explained:

We get them frozen veggies sometimes, you know, when we've got enough money, but we haven't got a big fridge see..... even we can't fit the fruits in there. If we do get a deep fridge we can frozen some bread and that you know.

And another client who said she tries to buy good food but reflected that:

It's sometimes hard when not much money and their fridge might be broken.

How eating healthy food in the home environment can best be facilitated is something worth exploring with clients.

It's important that presenters are specific, relevant and realistic when presenting information in their sessions.

The relationship the clients have with the doctor is also highly important as revealed by one client.

Yes, I always ask the doctors if I'm not sure of anything, you have to explain it to me, I don't like seeing a doctor that doesn't want to explain anything to me. Because I heard all that on the TV you know how they get information, if you don't know anything about your tablets then go to the pharmacy and talk there and all that. And I thought yes I will ask questions about it and I will ask the doctors female or male, you have to tell me, explain, you know it's my body, it's mine and I want to know what's going on.

It's essential that doctors build up a good relationship with the clients and to understand their background (story) unfortunately it is not always possible for doctors to spend a lot of time with patients. As one client, who has enjoyed a good relationship with one of the doctors, states:

.....that the doctor has got to know you too and listen to your story, but sometimes these Wurli mob too busy, hurry hurry. Plus big mob us waiting in the room.

Having access to transport is an important part of attending Diabetes Day. A bus is provided for clients to attend the program which leaves early on Thursday morning to pick up clients from their homes. Clients who use this service state they would find it difficult attending the program if this transport was not available.

However one client, who appreciates the access to transport, was not very impressed with the bus's cleanliness and stated:

The only thing there is they don't know how to clean their bus, they need to wipe down, people you don't know they stick everything everywhere, you know, they should come back to the main clinic maybe a hour earlier or if they've got nothing to do within that hour clean the bus, make it smell nice, it's always got an unpleasant smell, it's not nice, and we've all got to use the bus.

The attitude of the driver of the bus plays an important part in clients attending the program. One client feels it would help with attendance if the drivers were more involved in getting people to come along to Diabetes Day and had this to say about the bus drivers:

Lots of times they go out too early and when they do go out there, their blowing their horn and waiting for them to get in the car, they should get out of the bus and go and talk to the clients that have got to come in here. Wait for them to have a shower, explain to them that today's Diabetes Day and you've got to be there, not say I'm not going today I haven't had a shower, talk them around get them to get in the bus. It's costing them nothing, it's costing nothing to sit down and listen to what they're talking about, listen to other peoples stories, talk like that to them to encourage them to come along. They say oh I'm not coming and they just drive on to the next one.

Some Indigenous people, particularly older people, feel that the practice of a driver entering a community and blowing their horn to get attention is disrespectful and would prefer them to knock on their door to let them know of their arrival.

The relationship the clients have with the bus drivers is very important as pointed out by one client who has a preferred driver (Bob) who says that without him sometimes she won't get on the bus as he knows where to find her and will wait for her '*not like them others*'.

This is an important aspect that needs to be pursued.

There is one male and one female Aboriginal Health worker which are appropriate for clients who generally prefer seeing or talking to someone of the same gender. Although the program caters for both male and female and males do participate, there tends to be more female clients attending Diabetes Day. It is possible that the men that

do come along are medicalised ie more confident in using medical services whilst more traditional men may feel intimidated. It may be more effective to provide a Diabetes Day at Strongbala (Wurli's Mens Health Program) which focuses on men only.

Indigenous health workers expressed amazement that Indigenous clients are actually accessing the program.

As one health worker reported:

.....they're showing up that's the main thing, they're showing up and managing, even the act of just coming here, to get checked out, you know, I would say that's a big part of self-management. They bring their body here to be checked out, that's the first step of self management.

However the program needs to attract younger clients as most of the current clients are in the older category.

Many of Wurli's clients are unaware of Diabetes Day which is held at a different location i.e. Gudbinji. Only 37% of Wurli's clients attend Diabetes Day.

Some clients are aware of the program but don't know whether it is relevant or appropriate for them. People who are employed need to know if it is worth taking time off to attend the program.

When asked why she thought people from Wurli were not accessing the program one staff member responded:

I think the idea of them thinking that we're a chronic disease clinic, say for instance, a couple of weeks ago I had a lady in here who did have an impaired glucose tolerance test and she said "I haven't come to D.Day because I'm really on that border line to think that I don't have diabetes yet, I'm not on medication" but to think that she couldn't come. I was sort of a bit like is that the impression people get because they are not chronically ill that they can't come here.

The program needs to be more widely advertised and promoted to attract clients who are currently missing out.

6.3 Evaluation of Process – Were activities completed and to what standard?

Output 1: To support clients to improve the management of their Type 2 Diabetes and prevent complications.

Q In what way have clients been supported to improve management of Type 2 Diabetes?

A This has been achieved by the completion of the following five activities with the participating clients:

- The production of a Diabetes diary for use by each client.
- The set-up of a culturally appropriate self-management area to allow clients monitor blood glucose level, blood pressure, weight and waist circumference.
- The training of clients in self-management and facilitation of discussion concerning the results which they have collected and recorded.
- Promotion of increase uptake of insulin use and blood glucose level home monitoring kits.
- Facilitation of healthy food selection, preparation and cooking by clients.

The production of a Diabetes diary for use by each client.

The diaries are booklets that each client is given on their initial visit to Diabetes Day. They contain information on the training sessions, charts etc. They are used as a tool to enable the clients to record their observations such as blood pressure, HbA1c's, sugar levels, etc. measurements and gain an understanding of what these observations mean. The diaries are used by other staff members such as the GPs to assist them when they are doing their medical checks.

As mentioned by one staff member:

That's a big part of the program, in terms of one of our aims is to achieve self-management and for people to be given a diary each where they record their observations, their self assessment they just complete it in there.

The diaries enable the clients to self-manage their diabetes by increasing their awareness of the issues surrounding diabetes and in giving them some control over the disease.

As noted by one staff member

It gives them a bit of ownership also because the diary belongs to them, not us. We just look after them.

However there are some concerns regarding clients understanding the concept of the diary or of its contents. For clients whose understanding of English is limited and who are operating in a second language the diaries may be difficult to negotiate. As one staff member disclosed:

They'll write their blood pressure here, because they know there is some sort of thing that we'll require, sometimes they'll put the blood glucose level in the weight.

Another staff member added:

There's a lot of the clients that utilise diabetes day that are illiterate and they can't read and write and it's a bit difficult for them to know how to plot it on a graph and where to put their observations.

There are also some concerns that the diaries may be intimidating for clients who have poor English skills as one staff member remarked:

I know when I come to the back veranda that's set up for Diabetes Day and the first thing you see is their books and so it is that focused so when you come you get your book, you write all the information in it and I can see how confronting that would be if they can't read or write.

However most clients who have been attending Diabetes Day on a regular basis have said they are comfortable using the diaries and find them useful in self-managing their diabetes even though they may not always fully understand how to use them correctly.

For some people it may take some time to grasp the concept as noted by one long term client when asked if he understood the information in the diaries:

When I first started I didn't understand it, about 18 months ago when I first started the books, I didn't understand it, but they keep telling us what's up the top there, but I never took much notice of it. Now that I look at it now, I think oh that's good my sugars down, my blood pressure's down – I understand it better now.

Clients whose English skills are limited find the pictures in the diary helpful particularly the emoticons that show a different expression depending on how high or low a reading is. As one client stated:

Sometimes like old people that don't know how to read English they always read them pictures.... Like the sad face is something wrong with your body and the smiling face is that you are losing weight.

Staff are aware of the difficulties some clients have using the diaries and are in the process of updating the diaries so that they are more client-based and user friendly.

Overall the concept of the diaries is a good one as they are a good information and education tool and generally clients have been very positive about them. For clients who do understand the concepts and are literate and attend Diabetes Day regularly the diaries appear to be a good self-management tool.

There is also some debate between staff as to whether the diaries should be taken home by the clients so they can use them at home or whether they should be left at the clinic.

Currently the diaries are left at the clinic for safe-keeping, confidentially reasons and accessibility for clients (in case they lose or forget to bring them in). Most clients were happy to leave them at Gudbinji although some of the long term clients liked the idea of taking them home to peruse them.

Set-up of a self-management area to monitor blood glucose level, blood pressure, weight and waist circumference.

The self-management area is set-up outside in the garden area of the Gudbinji clinic. Various monitoring equipment is set up on tables to enable clients to measure their blood sugar, blood pressure, weight and waist circumference. Clients then record their measurements in their Diabetes Diaries which they collect on their arrival.

The first point of contact is via one of the health workers who also doubles up as the receptionist and records all the clients' names on a laptop computer. The health worker teaches the clients how to use the equipment and how to record and interpret their measurements. Assistance is also on hand for any clients who are experiencing any difficulties.

If clients have high or abnormal readings they can be assessed by another health worker who will prepare them to see the doctor if necessary.

The self-management area is the first port of call when clients arrive on Diabetes Day and the self monitoring equipment is used frequently by attendees as this is considered to be the most important part of Diabetes Day.

As mentioned by one staff member:

It's an iconic spot to the point that if I go and try to rush them because I'm a bit late so I will say "hey guys do you want to come to the cooking area" and they will say "no we have to do this first", it's this religion around, checking, which is great because it gives a lot of potential about what you could do out of that.

The concept of self-management is an excellent one and both staff and clients agree that the self-management area is highly appropriate for Aboriginal clients.

As one staff member noted:

Well they seem to like it, and self-management is mainstay of diabetes management these days, because there are such huge numbers it's all about self-management, so I don't think that's a problem. I think the self-management area is good.

The area itself is attractive and welcoming and appears to be well-liked by the clients. As one client remarked when asked if she thought it was a good area for self-monitoring:

It is you can just go out there and sit down really, and it's nice and cool, and there are tables and chairs provided, same as inside there's a big table and chairs provided. You don't want for anything here really.

Being able to talk to each other about diabetes and tell their stories is important to Aboriginal clients and all the clients interviewed have mentioned that they enjoy having somewhere to sit and “have a good yarn”.

As noted by one client when asked about the area:

Yes that's a good area, its good out there, fresh winds, sit outside have a good yarn with old peoples have a good yarn with them and tell stories.

Train clients in self-management and discuss results collected and recorded with them.

The health workers receive informal training to enable them to train the clients in self-management. They state that they instruct the clients in self-management by demonstrating how all the equipment works and how to record their measurements. This may also be reinforced during the education sessions that take place on Diabetes Day. One issue is that clients attend Diabetes Day on a random basis so there is no formal structure to training clients. As one staff member observed:

Because different people come and go all the time, it's very hard to have a lot of structure with the clients we deal with. You know what I mean. You welcome them wholeheartedly, you don't say oh no we are not starting a bunch of training till next week. We take people all the time, you know what I mean, we have new people and old people.

This makes it difficult for staff to know at what level different clients are at in their understanding of self management. As Diabetes Day has a throughput of between 15-20 participants it can place a lot of pressure on staff who may find it easier and quicker to take over the monitoring and recording themselves rather than instruct the client in self management particularly if the client has literacy problems etc. As one health worker stated:

Like I said a lot of them are semi-illiterate and can't read and write properly so I write a lot of stuff for them. Some people I still do everything for them, because they just can't catch it, but the mere fact that they are here is not an indictment on their self-management it's the mere fact that they even arrived here is the biggest statement.

And further commented:

..... because I also have manual cuffs here and a stethoscope if I've got the time I'll check them but we're trying to get through 15 – 25 people in a 4/5 hour period, it gets really hectic out here.

As previously mentioned in relation to the diaries self-management is effective for clients who are literate and are able to interpret their observations.

Clients are encouraged to discuss their results with staff members at the clinic. As noted by one staff member:

They discuss it with the doctor, the health worker and they discuss it amongst - sometimes we were quite careful with the confidentiality side of things - but they are very happy to discuss it amongst themselves.

However some clients, who have elevated or abnormal readings, aren't automatically sent to the doctor to be further assessed. This often happens when a client says they don't want to see the doctor or don't think they need to see a doctor despite their negative results or the fact they have been recalled specifically to see the doctor.

Most clients state they understand the importance of self-checking, why their readings need to be at a particular level and the strategies they can use to manage their diabetes.

As responded by one client when asked if he understood the importance of self-checking:

Oh yeah I understand that, my mind sort of works like a motor car, you know, if the car doesn't work you've got to find out what causes it to stop, and why my sugar is down and blood pressure's up and that that's causing it.

And when asked if she knew what a good blood pressure was for her one client responded:

'It has to be 120/180.

However only a few long-term clients were able to say what their current observations were or what they should be.

As one member of staff noted:

.....but it hasn't been done with any degree of particular understanding or comprehension of what these things mean. I talk to people about them every time I see them, but I'm also talking to them about, if I go through their sugars, their blood pressures, their cholesterol, their ACR, their EGF or all the tablets that they are on, they're exercise,

their smoking, their weight, and giving these brief interventions, there's no way people can remember that. It's an incredible amount of information so they're not going to be taking that home. And they don't need to know, just the sort of blood pressure and the blood sugars, I think, they're just the two key ones that people really need to get.

Staff has also noted that some clients are not using equipment correctly i.e. they are placing blood pressure cuffs over clothing, moving their arms around when taking a reading and using the wrong size cuffs resulting in incorrect readings. According to one staff member:

Results are always higher than they should be like there'll be a reading of 180 and they'll come in and they'll see me and I'll do it manually and it'll be 110.

Most clients when asked what their current observations were or what they should be were rather vague in their responses. Only a few long-term clients were able to respond confidently and give exact readings.

Clients who have been attending over a long period, or on a regular basis and can read and write English appear to be the most proficient in using the self-monitoring equipment, understanding the concept of self-management and interpreting the results.

Increase uptake of insulin use and blood glucose level home monitoring.

Measures to increase the uptake of insulin have been facilitated by the staff who encourage clients to become involved in insulin management. Clients are assisted by staff to register with the diabetes scheme which gives them access to the pharmacy and Diabetes Australia. As mentioned by one staff member:

.....and I think giving them that access to the pharmacy and Diabetes Australia is another aspect of keeping them involved in their own self-care and so they know that if they can't get in here or can't get to see a doctor they've got another form of access to get support from. And I think that's really important.

Access to BGL home monitoring machines has been made easier for the clients by not charging a fee for the machines. Most clients were unable to afford the nominal fee of \$20 that was initially charged.

For people who are on insulin it is important to monitor blood glucose levels to get the right dose. The home self monitoring kits (glucometers) allow clients to do this themselves at home. With better access to these kits it appears there has been a substantial increase in the uptake of insulin and kits as evidenced by the following staff worker:

We give people, and I've given out 60 – 80 of those during the time I was at Wurli, certainly there was an increase in uptake, because it was driven again. There were about 20 – 30 clients that were on insulin out of a client base of 250 I think or nearly 300, that's probably nearly 10% on insulin that's an increase of 100% from ten to now thirty.

However the process of starting someone on insulin and supporting them is quite onerous particularly if there is no access to a diabetes educator. As one staff member declared:

Since the diabetes educator left looking after the people on insulin is really difficult I think, and getting people started on insulin, is really difficult. I don't have time to start people, spend two hours educating one patient about insulin on Thursday. I can start the ball rolling and try to get them to come back in another day, they usually don't. So it's very hard, and then some people we get started on, yes we need a diabetes educator for that desperately, really desperately.

Most of the clients interviewed were on insulin and all clients on insulin had a home monitoring machine. Some of these did regular checks and had a good understanding of how to regulate insulin at home. However these were long-term clients with good literacy and numeracy skills. Other clients on insulin stated that although they took the machines home they would forget to use them. As noted by one staff member:

..... you know some clients just have that BSL machine and think they are doing something good for their health just through having it. Some are testing and really don't know or notice what the numbers means, they don't understand them just yet and some are empowered through it, and this is very much what we should be doing, to empower you to take care of your health and take decisions upon results.

Even clients who are regulating their insulin effectively require the support of a diabetes educator as one client responded when asked about insulin education:

I was on 90, and I was good, that's when I first started on insulin, I was good it was down low all the time and then for some unknown reason I got sick and it just pushed everything out of proportion and they're trying to get it back down again, oh it's hopeless I just really need to, the lady that was here, (diabetes educator), she's gone now to Cairns, I used to talk to her and ask her to help me understand, I need to understand it a lot better than I know now. I just want somebody to talk to because that's really important to have that understanding.

Generally for clients who understand how to use the machines and the concept behind them the home monitoring kits are very effective.

Facilitate healthy food selection, preparation and cooking by clients.

The healthy food selection is facilitated by the nutritionist who assists the clients in selecting, preparing and cooking a healthy meal on Diabetes Day.

Recipes are selected by the clients based on the knowledge they have gained through the education sessions run by the nutritionist on Diabetes Day.

Initially the nutritionist was very much involved in the cooking but clients who have now become more familiar with the process have been encouraged to take it on themselves. A roster has now been developed with the clients who are rostered to cook the meal choosing the recipe. The shopping is done by the nutritionist who lays out the ingredients ready to be cooked.

The staff at Gudbinji agrees that this activity has been successful and is well facilitated by the nutritionist. As one staff member testifies:

..... the clients get so involved in it and I think that's wonderful, and when you go into the kitchen and there's the females that have done it and they take over and don't need much direction, so the education they've got coming to Diabetes Day has enabled them, even if it's just once a week, to cook a healthy meal for a group of people, and that in itself is an achievement. So I think that's wonderful.

This was corroborated by another staff member:

Yes, I always ask the doctors if I'm not sure of anything, you have to explain it to me, I don't like seeing a doctor that doesn't want to explain anything to me. Because I heard all that on the TV you know how they get information, if you don't know anything about your tablets then go to the pharmacy and talk there and all that. And I thought yes I will ask questions about it and I will ask the doctors female or male, you have to tell me, explain, you know it's my body, it's mine and I want to know what's going on.

Another staff member also agreed:

Yes, I always ask the doctors if I'm not sure of anything, you have to explain it to me, I don't like seeing a doctor that doesn't want to explain anything to me. Because I heard all that on the TV you know how they get information, if you don't know anything about your tablets then go to the pharmacy and talk there and all that. And I thought yes I will ask questions about it and I will ask the doctors female or male, you have to tell me, explain, you know it's my body, it's mine and I want to know what's going on.

“Yes it works well because then they understand by doing it themselves, by having the Diabetes Day they have the education session and they understand what foods to eat and with the food they are realising how to cook it in that way where you can make it tasty and that it is quite safe for them, and they are just getting the nutrients, so yes they do understand.

The nutritionist has also motivated clients to become creative with leftover ingredients, when resources were limited, which indicates clients have gained an understanding of the concept of healthy food. As she mentions below:

..... and we had damper, white flour that they would use and they would put oats in it, because we didn't have wholemeal flour, so the damper hopefully would have a lower GI, some tuna tins that were really small and they put tinned veggies in it and that was that. That kind of mix of damper and tea, so I thought that was a really well done thing.

All clients interviewed spoke positively about the cooking sessions and felt they were an important and enjoyable part of Diabetes Day. Clients stated they had received a recipe book containing healthy meals from Gudbinji and they use these to prepare meals at home.

They particularly enjoy putting the information they have learned from the education sessions on healthy eating into practice and have become more motivated, confident and skillful in preparing healthy meals through participating in these sessions. They state their eating habits have changed since coming to Diabetes Day and learning about the dangers of eating too much salt, sugar and fatty foods.

Output 2: To support clients to improve the management of diabetes-related co-morbidities such as coronary artery disease, hypertension, dyslipidemia, obesity, renal disease and social and emotional issues.

Q. In what way have clients been supported to improve the management of the following diabetes-related co-morbidities:

- **Coronary artery disease**
- **Hypertension**
- **Dyslipidemia**
- **Obesity**
- **Renal disease**
- **Social and emotional issues.**

A. The clients have been supported in the management of diabetes-related co-morbidities by providing the following:

- Provision of an eight week diabetes education program
- Provision of shopping tours to facilitate the purchase of healthy food

- Provision of health management plans and appropriate medical care by a GP working with the program
- Streamlining of medication by the provision of Meditechs and home medication reviews
- Facilitation of healthy food selection, preparation and cooking by clients – this has been addressed in output 1

Plan and run an eight week education program.

The education programs run on Diabetes Day and consist of eight different sessions which are rotated over an eight week period. They include, What is Diabetes? Healthy eating; Alcohol and smoking; Physical activity; Social and emotional wellbeing; Foot care; Medications; Eye health.

For the first 18 months the sessions were well structured and facilitated by the Nutritionist. However, despite a roster being put into place, the program fell apart whilst she was away and dropped to a few irregular sessions on Healthy eating; Foot care and Physical Exercise.

Now the Nutritionist has returned the program should get back on track. The education program has been reviewed and two additional sessions, Weight Loss and Buying Better Food, may also be available in the future making this a ten week program.

Feedback from staff members indicate that when the program is facilitated well it is effective. As reported by one staff member:

They've been brilliant, it's not really structured properly yet, mainly because of coming and going. But when the sessions are here they are well attended everyone who goes in and listens if they're not eating they all go in there and sit down and listen because that's where a lot of lives are changed at those education sessions.

This was further corroborated by another staff member

Yes, I always ask the doctors if I'm not sure of anything, you have to explain it to me, I don't like seeing a doctor that doesn't want to explain anything to me. Because I heard all that on the TV you know how they get information, if you don't know anything about your tablets then go to the pharmacy and talk there and all that. And I thought yes I will ask questions about it and I will ask the doctors female or male, you have to tell me, explain, you know it's my body, it's mine and I want to know what's going on.

And further evidence by another staff member

Yes the programs are effective – we are not very good at evaluating each of them just because it's very intense every week I have done some focus groups over the years and I have some results there tucked away and they've always been very happy, with the feedback they've always been very happy.

Clients indicate they find the education sessions useful, and have attended the Healthy eating; Foot care; and physical exercise sessions, many clients also attended an exercise class on a Wednesday, which they are finding very enjoyable. The sessions have been found to be very useful and informative and have assisted in helping them manage their diabetes. Clients state they have been able to pass on the information they have learned to family and friends.

A few clients have indicated they would like the sessions to be more regular, so they don't forget information, and to be more explanatory. When asked if he wanted sessions to be more in-depth one client responded:

Yes to get more understanding, talk about different things and I just sit there and think I'll wait until she comes back and gives us another session, because the sessions are too far and few between. Some just show pictures and all that, they don't explain it properly, need more input into it. Some of them are really good and they'll come back in another fortnight to follow up. But as soon as they go everyone forgets what they were talking about, until they come down next time. We need them on a more regular basis like 3 times a week.

Also it was felt that more time was needed for asking questions to gain a fuller understanding of the subject matter as one client stated:

They've got a set time, which is only for one hour, which is not long enough, especially when you've got a big mob of clients, there's a lot of questions that they want to ask and they're going that fast through them, slow it down and wait until they finish, give them time to think about it, by that time they're on to the next questions..... so we need longer sessions.

Provide shopping tours for clients upon request

The shopping tours were trialed initially but the mechanics of the operation proved too difficult. The tours required clients to be picked up from their homes (quite often the staff member had to search for them) early in the morning. This was done using the staff member's own vehicle before driving to work. Eventually this became too labour intensive, and as requests were infrequent, alternative activities were examined.

Eventually the Nutritionist came up with the idea of teaching clients how to read food labels on food packages etc. when purchasing food at the shops so they understand how much salt, sodium and fat they contain. From this Food Label cards were designed indicating the amounts of fat, sugars, fibre and sodium that you needed to be aware of when buying food.

This strategy appears to work very well as one staff member states:

I think it (food tours) was requested in the beginning but not so much now. So Alex teaches them about food labels and stuff and that would be a good way to reinforce it. I think people are already buying their own good food and using labels and watching what they are buying now and they're watching for salt, sodium and fats.

Some of the clients interviewed stated they had been on the shopping tours when they were originally happening and found them quite useful. However it appears that teaching clients how to read food labels has been a positive alternative to the food tours. Most clients interviewed said they knew what ingredients to be cautious of and were now buying healthier foods. Some clients have found the food label cards handy and had passed these on to their friends and relatives. One client was proud that she had been able to help her son-in-law, who also has diabetes, in this way. Other clients aren't using the food label cards anymore because they knew what to look for on the food packages.

Provide medical care through Adult Health Check, GP Management Plan and appropriate referrals to Allied Health professionals.

Medical care, which includes Adult Health Checks and GP management plans, is provided by a GP who is in attendance throughout Diabetes Day. The GP sees clients who have been recalled or who have just "dropped in" to Diabetes Day and need to be checked out because of their readings.

Clients that are being seen by the GP generally receive appropriate medical care. According to one GP:

Yes they're getting appropriate medical attention when they're seen, definitely.

Unfortunately not all clients who need to be seen are being seen by the GP. As mentioned before even if a client has been recalled specifically to come in to see the doctor, if the health workers ask them if they want to see the doctor they often say no, and they are not encouraged to see the GP. As one GP revealed:

Yes they're getting appropriate medical attention when they're seen, definitely. But the system for follow up of these patients is failing, so their overall care is not happening.

Also the recall system has not been functional for some time due to various factors and is now in the process of being fixed. Having a dysfunctional recall system and follow-up system makes it difficult to provide appropriate medical care. One staff member observed that:

If you haven't got a recall system or a functional follow-up system then you've got all these people that are coming in that aren't seeing the doctor when they should be seeing the doctor and we are not getting them to come in other days.

And another staff member on being asked if medical care was appropriate remarked:

Medical care is being appropriately provided for all consults that are given, so yes in that aspect, but because there's no recalls, and because there's a dysfunctional follow-up system they're not getting this.... I can see them once and uptitrate their blood pressure tablets, then they need to get seen again in two weeks, if they don't come back for 3 months, if I don't see them again in 3 months, I go "oh look your blood pressure is still awful here I'll uptitrate your blood pressure tablets – can you come in 7 months down the track. So yes the people I see get the medical care that they should get on the day that I see them, they get appropriate medical care.

Another concern is the high number of consults that the GP has to do on that day, particularly if there are a number of new clients who require management plans setting up. As one GP divulged:

When people are coming through to see me there's just an overwhelming number of people. I can't see 20 patients or 22 patients in three hours when all of those people are needing realistically, new patients to the clinic are needing an hour appointment each. So people aren't the time spent with them that they need to have spent with them they don't want to come in other days to the clinic because they've already come in to Diabetes Day, they've already been at the doctors for 3 hours this week, why would they want to come in another day. So what we're trying to do now is just book people in for other days not Diabetes Day, I don't know how that's going to go, so we'll see. It had got to a point where it was ok, everyone had their GP management plans up to date and the main people I would have seen. But now there's sort of lots of new people coming through again, so it's just become overwhelming again I'm here until 7 of 8 o'clock at night doing team care arrangements and referrals.

Streamline medications through Meditechs and Home Medication Reviews

Meditechs are packaged tablets which are pre packed at a pharmacy. These are extremely useful for clients who are taking a number of different tablets a day. Instead of giving clients all boxes of tablets (a box of 30 for one and 100 for another) they are given packages with all breakfast ones together, all dinner ones together etc.

Most of the clients are using meditechs and as most diabetics need to take at least five tablets a day this is an effective way of streamlining medications. Staff members find meditechs are very practical, convenient and appropriate for this clientele. As mentioned by staff members:

It just makes it easier for them to cope with all their tablets as it's all streamlined for them, so you're not wasting a whole lot tablets if they're not taking them. Yes it's a much better system for our clients.

But these are brilliant, like medformen is a large white oblong and a lot of these mob even though they haven't got the reading or writing, they'll tell you what colour. These are our blood thinners, to us its warfarin to them it's purple.

Clients state they find the packs useful and they make it easier to take their medications.

One client responded when asked if it helped in taking medicines:

Oh yeah, you can control it more. Before they used to give it to me in bottles, every day I have to take tablets, got very confusing, but now they've got them in those little satchels and it's a lot easier.

Clients declared that they don't stop taking tablets but admit to forgetting to take them occasionally.

The main problem appears to be when clients "run out" of tablets or forget to pick them up in time. As one client noted:

I ran out of tablets on Friday and I go to pick them up, but it was Show Day, so everywhere was closed. So all that weekend I had no insulin. I tell you what I was crook, my sugars were up around 23.

This has been acknowledged by a few staff member who felt streamlining of medications could be improved. One staff member noted:

Yes meditechs are really good. I think the other thing we maybe need to look at is where a lot of people fall off with their tablet taking is when it's time to pick up new tablets and then they'll miss them for like a month or 2 months or 3 months or however long, maybe we can try to work out some

way in which we can have a system where we can send out a reminder, or we can send the tablets out to them, I don't know maybe something like that just to help people with their tablet taking.

Another staff member noted:

I think the other one we need to look at is a lot of patients who would like to take their tablets, you know are pretty motivated to take their tablets, so it's not the people who are missing their tablets because everything else in their life is dysfunctional so therefore it's impossible to take their tablets, people who are motivated to, but there sort of not completely functional so they are kind of forgetting. The other thing that I think would be worth looking at would be getting an alarm, you know the alarms that go off each day, and that's been shown to have a massive, like a 30 or 40% increase in compliance as well. It's not for everyone, but for people who've got a stable enough house for it to be functional with.

Home medication reviews consist of a pharmacist going into clients homes and checking the medications they are on, look at how they are stored, how much they have in their homes, if they have been taking them correctly, the expiry dates, and whether the different tablets clash with each other. The pharmacist then informs the doctor of their findings and makes recommendations. These reviews are not longer operating as there is no pharmacist available to perform them.

However when they were operating both staff and clients found them very effective in streamlining medications.

As observed by one member of staff:

We use to have the home medication reviews and that was very successful at the time because clients were on various medications, more than 5 and the pharmacist would tailor it that medication prescriptions were much better.

another staff member also agreed:

The reviews were very, very useful, then they write a letter back to the doctor suggesting well there not taking this anyway, maybe we shouldn't have that one with that one – they just advise the doctors – it's wonderful.

Some clients indicated they had participated in a home medication reviews and found them very useful. As one participant responded when asked what she thought about the reviews:

Yeah that was really good. Cos I've seen that on TV, that's what give me the idea well they're coming to tell what I can take and what I can't take.

I'm not sure about and then I can talk to the doctor, and I thought that's very good because you need to know where it's coming from.

Facilitate healthy food selection preparation and cooking by clients

This has been addressed in Outcome 1 – Activity 5

7. Conclusion

The overall design of the program is very good with sound program logic used to link activities causally to final outcome. This logical framework approach has ensured effective evaluation of the program and demonstrated that the program model is basically sound and generalisable to other services. However the evaluation did highlight areas that were sub optimal and negatively affecting outcome. These issues were system failure issues including poor recall system, intelligibility of education sessions, medication compliance and transport issues. The causes of all these issues were able to be examined in some detail and solutions found. All issues are easily fixable and once addressed will lead to a very high quality program.

From the discussion on the evaluation of process it can be seen that planned activities were carried out to a good standard and this is confirmed by feedback from clients and program staff. This had the effect of achieving the objective of supplying a culturally appropriate service delivery model as described in the evaluation of impact and confirmed through client interviews.

Has the wellbeing of clients with Type 2 Diabetes at Wurli-Wurlinjang Health Service been improved?

From interviews with clients and staff it can be seen that for clients on the program there is a substantial benefit to social and emotional wellbeing. Data provided by the clinical audit shows a small but significant improvement in clinical outcomes for those regularly attending the program. Improvements around recall, medication compliance and education have the potential to increase positive clinical outcomes significantly. The use of the “communicare” computerized clinical data system also means that the effect of proposed changes can be measured.

Key Findings

- The Diabetes day program is an excellent concept highly acceptable to Indigenous clients.
- Social and emotional issues are being well addressed.
- The medical staff and Indigenous health workers hold different perspectives and expectations of the program.

- The lack of a dedicated Diabetes Educator and Receptionist had a very negative effect on the effectiveness of the program.
- Driver attitude and understanding of cultural issues greatly affects the number of clients that will access provided transport.
- Clients are keen to learn from the education sessions but find a lot of the information presented confusing. Sessions that are informal, interactive, realistic and rely on examples and explanations rather than analogies are preferable.
- Formalising the training sessions for health workers on diabetes related issues would impact positively on the health workers and the program.
- Home medication reviews were found to be very helpful to the clients.
- Many clients of Wurli's main clinic are not accessing Diabetes Day either because there is a perception that it is for clients with a serious illness or they are just unaware of the program.

Recommendations

- An effective recall system is implemented.
- A dedicated Diabetes Educator is employed.
- A dedicated receptionist and possible liaison officer is employed (documenting clients and related tasks such as taking blood samples to the lab takes up valuable health worker time that should focus on clients).
- Implement a system whereby attending clients who have been recalled or have abnormal readings are automatically checked in to see the doctor. (follows from having a dedicated receptionist).
- Form a consultative team with presenters of education sessions to develop terms of reference to ensure education sessions are presented in the most effective way for the client group.
- Team meetings are held directly following Diabetes Day activities.
- Improve/extend outside meeting area so it is usable during wet weather.
- Provide job descriptions, policy and procedures documents for key staff to ensure program continuity in the face of staff turnover.
- Recommence home medication reviews.
- Accredited diabetes training made available for the health workers.
- Diabetes Day is actively promoted, particularly within the service.

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