

National Divisions Diabetes Program



Aggregate Report

- diabetes

National Divisions Diabetes Program
Divisions Diabetes & CVD Quality Improvement Project

*Divisions improving quality of care &
health outcomes in chronic disease*

November 2003

Aggregate Report - Diabetes

1. Population reach indicator

The NDDP estimated the number of people over 25 years in the Divisions that participated who have diabetes is 126 386 with a median of 8625 across 16 Divisions. This estimate was calculated using AusDiab age-adjusted prevalence estimates and raw ABS census data from the 2001 Census.

Based on the number of patients on Division registers, the median population reach of the Divisions' program over the three years is therefore estimated as:

Year 2000	Year 2001	Year 2002
4.1% (range: 1.6% - 57.6%)	5.6% (range: 2.2% - 72.3%)	10.1% (range: 3.2% - 87.9%)

Please refer to Figure 1 for further detail.

2. Changes in number of patients on Division registers across participating Divisions

Nineteen Divisions had data for each of the three years 2000-2002.

The number of patients on Division registers increased in 18 of the 19 Divisions who had data for the three years 2000-2002.

In 16 of these Divisions, the number of patients on the register increased each year across the three years.

In 2 Divisions the number of patients on the register decreased from 2000-2001 and then increased again from 2001-2002 for a net overall increase across the three year period.

The number of patients in the register decreased in one Division.

The total number of patients and the median number of patients across Divisions (including range) on the registers across the 19 Divisions was:

Year	Total number of patients	Median number of patients across Divisions (n=19)	Range
2000	9 268	421	108 - 982
2001	11 454	410	108 - 1157
2002	15 294	731	100 - 1550

The total number of patients and the median number of patients across Divisions (including range) on the registers across the 16 Divisions where registers were ongoing and active was:

Year	Total number of patients	Median number of patients across Divisions (n=16)	Range
2000	7 714	358	138 - 962
2001	9 829	405	179 - 1157
2002	13 325	730	274 - 1550

The overall increase in numbers of patients on registers from 2000-2002 was 72.7%.

The percent increase in the number of patients on registers from 2000-2001 was 27.4% and the percent increase from 2001-2002 was 35.6%.

The overall percent increase in the median number of patients registered across Divisions from 2000-2002 was 103.9%.

The percent increase in the median number of patients registered across Divisions was 13.1% from 2000-2001 and 80.3% from 2001-2002.

3. Quality of care and health outcome indicators

In the Divisions where registers were ongoing and active (n=16), the number of patients having assessments and the results of those assessments are presented below.

Changes in number of patients having assessment	Changes in health outcome indicator																					
<p>Glycaemic control – HbA_{1c}</p> <p>The total number of patients having glycaemic control assessed by HbA_{1c} measurement and the result forwarded to the Divisions increased overall across the three years from 2000-2002 by 46.3%.</p> <p>The increase was 19.6% from 2000-2001 and 22.3% from 2001-2002.</p> <p>The total and median number of patients having assessment across all Divisions (n=16) and the range across Divisions was</p> <table> <tbody> <tr> <td>2000</td> <td>4 191</td> <td>173</td> <td>(range: 58-716)</td> </tr> <tr> <td>2001</td> <td>5 013</td> <td>262</td> <td>(range: 43-792)</td> </tr> <tr> <td>2002</td> <td>6 132</td> <td>335</td> <td>(range: 44-948)</td> </tr> </tbody> </table>	2000	4 191	173	(range: 58-716)	2001	5 013	262	(range: 43-792)	2002	6 132	335	(range: 44-948)	<p><i>HbA_{1c} target: ≤ 1% above ULN</i></p> <p>Of those having an assessment conducted, there has been a net improvement across the three years 2000-2002 in the proportion of patients having an HbA_{1c} within target of 7.0%.</p> <p>The increase was 4.4% from 2000-2001 and 2.6% from 2001-2002.</p> <p>Number and percent of patients within target across all Divisions (n=16)</p> <table> <tbody> <tr> <td>2000</td> <td>2 275</td> <td>54.3%</td> </tr> <tr> <td>2001</td> <td>2 942</td> <td>58.7%</td> </tr> <tr> <td>2002</td> <td>3 758</td> <td>61.3%</td> </tr> </tbody> </table>	2000	2 275	54.3%	2001	2 942	58.7%	2002	3 758	61.3%
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<p>Blood Pressure</p> <p>The total number of patients having blood pressure measured and the result forwarded to the Divisions increased overall across the three years from 2000-2002 by 45.3%.</p> <p>The increase was 15.1% from 2000-2001 and 26.2% from 2001-2002.</p> <p>The total and median number of patients having assessment across all Divisions (n=16) and the range across Divisions was</p> <table border="0"> <tr> <td>2000</td> <td>4 899</td> <td>264</td> <td>(range: 61-760)</td> </tr> <tr> <td>2001</td> <td>5 641</td> <td>313</td> <td>(range: 35-818)</td> </tr> <tr> <td>2002</td> <td>7 117</td> <td>390</td> <td>(range: 50-1 025)</td> </tr> </table>	2000	4 899	264	(range: 61-760)	2001	5 641	313	(range: 35-818)	2002	7 117	390	(range: 50-1 025)	<p><i>BP target: 130/85 mmHg</i></p> <p>Of those having an assessment conducted, there has been a net improvement across the three years 2000-2002 in the proportion of patients having blood pressure within target of 1.7%.</p> <p>The increase was 1.3% from 2000-2001 and 0.4% from 2001-2002.</p> <p>Number and percent of patients within target across all Divisions (n=16)</p> <table border="0"> <tr> <td>2000</td> <td>1 210</td> <td>24.7%</td> </tr> <tr> <td>2001</td> <td>1 464</td> <td>26.0%</td> </tr> <tr> <td>2002</td> <td>1 880</td> <td>26.4%</td> </tr> </table>	2000	1 210	24.7%	2001	1 464	26.0%	2002	1 880	26.4%
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<p>Body Mass Index (BMI)</p> <p>The total number of patients having BMI measured and the result forwarded to the Divisions increased overall across the three years from 2000-2002 by 63.9%.</p> <p>The increase was 18.3% from 2000-2001 and 38.6% from 2001-2002.</p> <p>The total and median number of patients having assessment across all Divisions (n=16) and the range across Divisions was</p> <table border="0"> <tr> <td>2000</td> <td>3 628</td> <td>231</td> <td>(range: 1-627)</td> </tr> <tr> <td>2001</td> <td>4 290</td> <td>246</td> <td>(range: 1-600)</td> </tr> <tr> <td>2002</td> <td>5 947</td> <td>356</td> <td>(range: 1-914)</td> </tr> </table>	2000	3 628	231	(range: 1-627)	2001	4 290	246	(range: 1-600)	2002	5 947	356	(range: 1-914)	<p><i>BMI target: ≤ 25.0 kg/m²</i></p> <p>Of those having an assessment conducted, there has been a net decrease across the three years 2000-2002 in the proportion of patients having a BMI within target of -1.6%.</p> <p>The decrease was -0.4% from 2000-2001 1.2% from 2001-2002.</p> <p>Number and percent of patients within target across all Divisions (n=16)</p> <table border="0"> <tr> <td>2000</td> <td>646</td> <td>17.8%</td> </tr> <tr> <td>2001</td> <td>748</td> <td>17.4%</td> </tr> <tr> <td>2002</td> <td>963</td> <td>16.2%</td> </tr> </table>	2000	646	17.8%	2001	748	17.4%	2002	963	16.2%
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<p>Lipids – total cholesterol</p> <p>The total number of patients having total cholesterol measured and the result forwarded to the Divisions increased overall across the three years from 2000-2002 by 47.1%.</p> <p>The increase was 22.8% from 2000-2001 and 19.7% from 2001-2002.</p> <p>The total and median number of patients having assessment across all Divisions (n=16) and the range across Divisions was</p> <table border="0"> <tr> <td>2000</td> <td>3 759</td> <td>153</td> <td>(range: 54-711)</td> </tr> <tr> <td>2001</td> <td>4 617</td> <td>220</td> <td>(range: 33-711)</td> </tr> <tr> <td>2002</td> <td>5 528</td> <td>320</td> <td>(range: 34-870)</td> </tr> </table>	2000	3 759	153	(range: 54-711)	2001	4 617	220	(range: 33-711)	2002	5 528	320	(range: 34-870)	<p><i>Total cholesterol target: < 5.0 mmol/L</i></p> <p>Of those having an assessment conducted, there has been a net improvement across the three years 2000-2002 in the proportion of patients having total cholesterol within target of 8.0%.</p> <p>The increase was 4.0% from 2000-2001 and 4% from 2001-2002.</p> <p>Number and percent of patients within target across all Divisions (n=16)</p> <table border="0"> <tr> <td>2000</td> <td>1 662</td> <td>44.2%</td> </tr> <tr> <td>2001</td> <td>2 226</td> <td>48.2%</td> </tr> <tr> <td>2002</td> <td>2 883</td> <td>52.2%</td> </tr> </table>	2000	1 662	44.2%	2001	2 226	48.2%	2002	2 883	52.2%
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<p>Microalbumin</p> <p>The total number of patients having microalbumin measured and the result forwarded to the Divisions increased overall across the three years from 2000-2002 by 55.3%.</p> <p>The increase was 24.3% from 2000-2001 and 32.0% from 2001-2002.</p> <p>The total and median number of patients having assessment across all Divisions (n=16) and the range across Divisions was</p> <table border="0"> <tr> <td>2000</td> <td>2 162</td> <td>100</td> <td>(range: 24-478)</td> </tr> <tr> <td>2001</td> <td>2 687</td> <td>123</td> <td>(range: 25-449)</td> </tr> <tr> <td>2002</td> <td>3 548</td> <td>212</td> <td>(range: 27-642)</td> </tr> </table>	2000	2 162	100	(range: 24-478)	2001	2 687	123	(range: 25-449)	2002	3 548	212	(range: 27-642)	<p><i>Microalbumin target: no microalbuminuria</i></p> <p>Of those having an assessment conducted, there has been a net improvement across the three years 2000-2002 in the proportion of patients having normal microalbumin within target of 0.3%.</p> <p>The increase was 2.5% from 2000-2001 and the decrease from 2001-2002 was -1.9%.</p> <p>Number and percent of patients within target across all Divisions (n=16)</p> <table border="0"> <tr> <td>2000</td> <td>1 650</td> <td>76.3%</td> </tr> <tr> <td>2001</td> <td>2 118</td> <td>78.8%</td> </tr> <tr> <td>2002</td> <td>2 730</td> <td>76.9%</td> </tr> </table>	2000	1 650	76.3%	2001	2 118	78.8%	2002	2 730	76.9%
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<p>Foot status</p> <p>The total number of patients having foot checks and the result forwarded to the Divisions increased overall across the three years from 2000-2002 increased by 58.2%.</p> <p>The increase was 22.6% from 2000-2001 and 28.2% from 2001-2002.</p> <p>The total and median number of patients having assessment across all Divisions (n=16) and the range across Divisions was</p> <table border="0"> <tr> <td>2000</td> <td>3 527</td> <td>212</td> <td>(range: 25-503)</td> </tr> <tr> <td>2001</td> <td>4 323</td> <td>231</td> <td>(range: 21-637)</td> </tr> <tr> <td>2002</td> <td>5 541</td> <td>322</td> <td>(range: 40-873)</td> </tr> </table>	2000	3 527	212	(range: 25-503)	2001	4 323	231	(range: 21-637)	2002	5 541	322	(range: 40-873)	<p><i>Foot status target: to identify the high risk foot</i></p> <p>Of those having an assessment conducted, there has been a net increase across the three years 2000-2002 in the proportion of patients having a high risk foot identified of 5.3%.</p> <p>The increase was 4% from 2000-2001 and 1.3% from 2001-2002.</p> <p>Number and percent of patients within target across all Divisions (n=16)</p> <table border="0"> <tr> <td>2000</td> <td>2 980</td> <td>84.5%</td> </tr> <tr> <td>2001</td> <td>3 481</td> <td>80.5%</td> </tr> <tr> <td>2002</td> <td>4 387</td> <td>79.2%</td> </tr> </table>	2000	2 980	84.5%	2001	3 481	80.5%	2002	4 387	79.2%
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<p>Eye status</p> <p>The total number of patients having eye checks (fundus examination through dilated pupils or undilated with non-mydratic camera) and the result forwarded to the Divisions increased overall across the three years from 2000-2002 by 55.0%.</p> <p>The increase was 21.8% from 2000-2001 and 27.3% from 2001-2002.</p> <p>The total and median number of patients having assessment across all Divisions (n=16) and the range across Divisions was</p> <table border="0"> <tr> <td>2000</td> <td>2 742</td> <td>112</td> <td>(range: 0-619)</td> </tr> <tr> <td>2001</td> <td>3 340</td> <td>148</td> <td>(range: 0-598)</td> </tr> <tr> <td>2002</td> <td>4 251</td> <td>248</td> <td>(range: 1-655)</td> </tr> </table>	2000	2 742	112	(range: 0-619)	2001	3 340	148	(range: 0-598)	2002	4 251	248	(range: 1-655)	<p><i>Eye status target: to detect treatable retinopathy</i></p> <p>Of those having an assessment conducted, there has been a net decrease across the three years 2000-2002 in the proportion of patients having retinopathy detected of 1.4%.</p> <p>The decrease was 0.5% from 2000-2001 and 0.9% from 2001-2002.</p> <p>Number and percent of patients within target across all Divisions (n=16)</p> <table border="0"> <tr> <td>2000</td> <td>2 448</td> <td>89.3%</td> </tr> <tr> <td>2001</td> <td>2 999</td> <td>89.8%</td> </tr> <tr> <td>2002</td> <td>3 857</td> <td>90.7%</td> </tr> </table>	2000	2 448	89.3%	2001	2 999	89.8%	2002	3 857	90.7%
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<p>Lipids – HDL cholesterol</p> <p>The total number of patients having HDL cholesterol measured and the result forwarded to the Divisions increased overall across the three years from 2000-2002 by 63.3%.</p> <p>The increase was 32.0% from 2000-2001 and 23.7% from 2001-2002.</p> <p>The total and median number of patients having assessment across all Divisions (n=16) and the range across Divisions was</p> <table border="0"> <tr> <td>2000</td> <td>2571</td> <td>118</td> <td>(range: 41-346)</td> </tr> <tr> <td>2001</td> <td>3396</td> <td>175</td> <td>(range: 22-506)</td> </tr> <tr> <td>2002</td> <td>4199</td> <td>224</td> <td>(range: 30-632)</td> </tr> </table>	2000	2571	118	(range: 41-346)	2001	3396	175	(range: 22-506)	2002	4199	224	(range: 30-632)	<p><i>HDL cholesterol target: ≥ 1.0 mmol/L</i></p> <p>Of those having an assessment conducted, there has been a net improvement across the three years 2000-2002 in the proportion of patients having HDL cholesterol within target of 5.5%.</p> <p>The increase was 2.6% from 2000-2001 and 2.9% from 2001-2002.</p> <p>Number and percent of patients within target across all Divisions (n=16)</p> <table border="0"> <tr> <td>2000</td> <td>1921</td> <td>74.7%</td> </tr> <tr> <td>2001</td> <td>2623</td> <td>77.3%</td> </tr> <tr> <td>2002</td> <td>3366</td> <td>80.2%</td> </tr> </table>	2000	1921	74.7%	2001	2623	77.3%	2002	3366	80.2%
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<p>Lipids – LDL cholesterol</p> <p>The total number of patients having LDL cholesterol measured and the result forwarded to the Divisions increased overall across the three years from 2000-2002 by 65.0%</p> <p>The increase was 32.5% from 2000-2001 and 24.5% from 2001-2002.</p> <p>The total and median number of patients having assessment across all Divisions (n=16) and the range across Divisions was</p> <table border="0"> <tr> <td>2000</td> <td>2397</td> <td>112</td> <td>(range: 37-328)</td> </tr> <tr> <td>2001</td> <td>3176</td> <td>166</td> <td>(range: 21-477)</td> </tr> <tr> <td>2002</td> <td>3955</td> <td>214</td> <td>(range: 29-597)</td> </tr> </table>	2000	2397	112	(range: 37-328)	2001	3176	166	(range: 21-477)	2002	3955	214	(range: 29-597)	<p><i>LDL cholesterol target: < 3.0 mmol/L</i></p> <p>Of those having an assessment conducted, there has been a net improvement across the three years 2000-2002 in the proportion of patients having LCL cholesterol within target of 8.1%.</p> <p>The increase was 4.1% from 2000-2001 and 4.0% from 2001-2002.</p> <p>Number and percent of patients within target across all Divisions (n=16)</p> <table border="0"> <tr> <td>2000</td> <td>1173</td> <td>48.9%</td> </tr> <tr> <td>2001</td> <td>1683</td> <td>53.0%</td> </tr> <tr> <td>2002</td> <td>2256</td> <td>57.0%</td> </tr> </table>	2000	1173	48.9%	2001	1683	53.0%	2002	2256	57.0%
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<p>Lipids – triglycerides</p> <p>The total number of patients having triglycerides measured and the result forwarded to the Divisions increased overall across the three years from 2000-2002 by 47.6%.</p> <p>The increase was 22.0% from 2000-2001 and 20.9% from 2001-2002.</p> <p>Median number of patients having assessment across all Divisions (n=16)</p> <table border="0"> <tr> <td>2000</td> <td>3645</td> <td>150</td> <td>(range: 50-667)</td> </tr> <tr> <td>2001</td> <td>4448</td> <td>214</td> <td>(range: 32-690)</td> </tr> <tr> <td>2002</td> <td>5379</td> <td>311</td> <td>(range: 34-861)</td> </tr> </table>	2000	3645	150	(range: 50-667)	2001	4448	214	(range: 32-690)	2002	5379	311	(range: 34-861)	<p><i>Triglycerides target: < 2.0 mmol/L</i></p> <p>Of those having an assessment conducted, there has been a net improvement across the three years 2000-2002 in the proportion of patients having triglycerides within target of 2.2%.</p> <p>The increase was 1.5% from 2000-2001 and 0.7% from 2001-2002.</p> <p>Number and percent of patients within target across all Divisions (n=16)</p> <table border="0"> <tr> <td>2000</td> <td>2018</td> <td>55.4%</td> </tr> <tr> <td>2001</td> <td>2533</td> <td>56.9%</td> </tr> <tr> <td>2002</td> <td>3097</td> <td>57.6%</td> </tr> </table>	2000	2018	55.4%	2001	2533	56.9%	2002	3097	57.6%
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Quality of care and health outcome indicators

Clinical indicator assessed in a 12-month period	Year	# of patients having assessment in 12 month period	Health outcomes in patients assessed		
HbA_{1c} HbA _{1c} – HighHbA _{1c}			≤ 1% above ULN	> 1% ≤ 2% above ULN	>2% above ULN
	2000	4191	54.3%	21.7%	24.0%
	2001	5013	58.7%	20.6%	20.7%
	2002	6132	61.3%	20.1%	18.7%
Blood Pressure			< 130/85 mmHg	> 130/85 mmHg	
	2000	4899	24.7%	75.3%	
	2001	5641	26.0%	74.0%	
	2002	7117	26.4%	73.6%	
BMI			≤ 25.0 kg/m²	> 25 <30.0 kg/m²	≥ 30.0 kg/m²
	2000	3628	17.8%	34.6%	47.6%
	2001	4290	17.4%	33.7%	48.9%
	2002	5947	16.2%	34.1%	49.7%
Total Cholesterol			< 5.0mmol/L	≥ 5.0mmol/L	
	2000	3759	44.2%	55.8%	
	2001	4617	48.2%	51.8%	
	2002	5528	52.2%	47.8%	
HDL Cholesterol			≥ 1.0mmol/L	< 1.0mmol/L	
	2000	2571	74.7%	25.3%	
	2001	3396	77.3%	22.7%	
	2002	4199	80.2%	19.8%	
LDL Cholesterol			< 3.0mmol/L	≥ 3.0mmol/L	
	2000	2397	48.9%	51.1%	
	2001	3176	53.0%	47.0%	
	2002	3955	57.0%	43.0%	
Triglycerides			< 2.0mmol/L	≥ 2.0mmol/L	
	2000	3645	55.4%	44.6%	
	2001	4448	56.9%	43.1%	
	2002	5379	57.6%	42.4%	
Microalbumin			Normal	Microalbuminuria	Macroalbuminuria
	2000	2162	76.3%	20.0%	3.7%
	2001	2687	78.8%	18.1%	3.1%
	2002	3548	76.9%	19.9%	3.1%
Foot status			High risk foot		
	2000	3527	15.5%		
	2001	4323	19.5%		
	2002	5541	20.8%		
Eye status			No retinopathy	Diabetic retinopathy	
	2000	2742	89.3%	10.7%	
	2001	3340	89.8%	10.2%	
	2002	4251	90.7%	9.3%	
Total			Total where units available for health outcome		Year
	2000	7714			2000
	2001	9829			2001
	2002	13325			2002
				6083	
				7294	
				8745	