

# Erratum

**The Diabetes Prevention Program Research Group. The 10-year cost-effectiveness of lifestyle intervention or metformin for diabetes prevention: an intent-to-treat analysis of the DPP/DPPOS. *Diabetes Care* 2012;35:723–730**

In the article listed above, an error was discovered in the calculation of the direct medical costs of inpatient care outside the DPP/DPPOS. The costs of inpatient care were underestimated across the lifestyle, metformin, and placebo treatment groups due to delayed reporting of hospitalizations by some clinical sites and the authors' failure to count hospitalizations when the study year in which they occurred was initially unknown. The authors have now corrected this problem. In addition, they have updated the analyses to include the complete resource utilization and cost data that are newly available through 10 years of combined DPP/DPPOS follow-up. The authors have also classified participants who were diagnosed with diabetes at mid-year study visits as having diabetes during that year.

Tables 1 and 2 show the corrected and updated undiscounted annual direct medical costs of the interventions and direct medical costs of care outside the DPP/DPPOS per participant. Table 3 shows the corrected differences in costs and quality-adjusted life-years (QALYs) and incremental cost-effectiveness ratios adjusted for survival. The revised results do not change the conclusions of the article. Over 10 years, the total per capita cost of the lifestyle intervention, that is, the average cost of the lifestyle intervention plus the average cost of medical care received by a lifestyle participant outside the DPP/DPPOS, was greater than the total per capita cost of the placebo intervention. This was true from all three study perspectives (health system, modified societal, and societal perspectives). Over 10 years, the lifestyle intervention also resulted in more total QALYs than the placebo intervention. Over 10 years, metformin had a slightly lower total per capita cost than placebo and yielded approximately the same number of QALYs as placebo. From a health system perspective, after adjusting for survival, and with both costs and health outcomes discounted at 3% per year, lifestyle cost was approximately \$13,000 per QALY gained compared with placebo. Metformin was cost-saving compared with placebo. Compared with metformin, lifestyle cost more but produced better health outcomes with a cost-effectiveness ratio of approximately \$15,000 per QALY gained. DPP group lifestyle was estimated to be slightly more costly but much more effective than placebo with a cost-effectiveness ratio of \$1,000 per QALY gained.

These updated analyses demonstrate that over 10 years, lifestyle, when compared with placebo, is cost-effective and metformin is marginally cost-saving. Lifestyle is also cost-effective when compared with metformin. If a DPP group lifestyle intervention could be delivered at one-third lower cost than the DPP lifestyle intervention and achieve the same outcomes, it would be extremely cost-effective compared with placebo.

The corrected Tables 1–3 and Figure 1 appear below. Supplementary Tables 1–4 have been revised and are available in Supplementary Data online (<http://care.diabetesjournals.org/lookup/suppl/doi:10.2337/dc11-1468/-/DC1>). The entire article including abstract, text, figure, and tables has been corrected online.

**Table 1—Undiscounted, per capita, direct medical costs of the DPP/DPPOS interventions by intervention group and study year (\$)\***

Year	Lifestyle	Metformin	Placebo	DPP group lifestyle†
1-DPP	1,826	584	87	898
2-DPP	887	294	50	563
3-DPP	915	299	47	590
4 (Bridge)	173	301	220	173
5-DPPOS	126	138	62	126
6-DPPOS	112	136	61	112
7-DPPOS	139	137	59	139
8-DPPOS	138	132	55	138
9-DPPOS	126	131	55	126
10-DPPOS	130	130	55	130
Total	4,572	2,281	752	2,995

\*See Supplementary Table 1 for details. †Sensitivity analysis. Assumes that the core curriculum and follow-up visits were conducted as group sessions with 10 participants during the 3 years of the DPP.

## Erratum

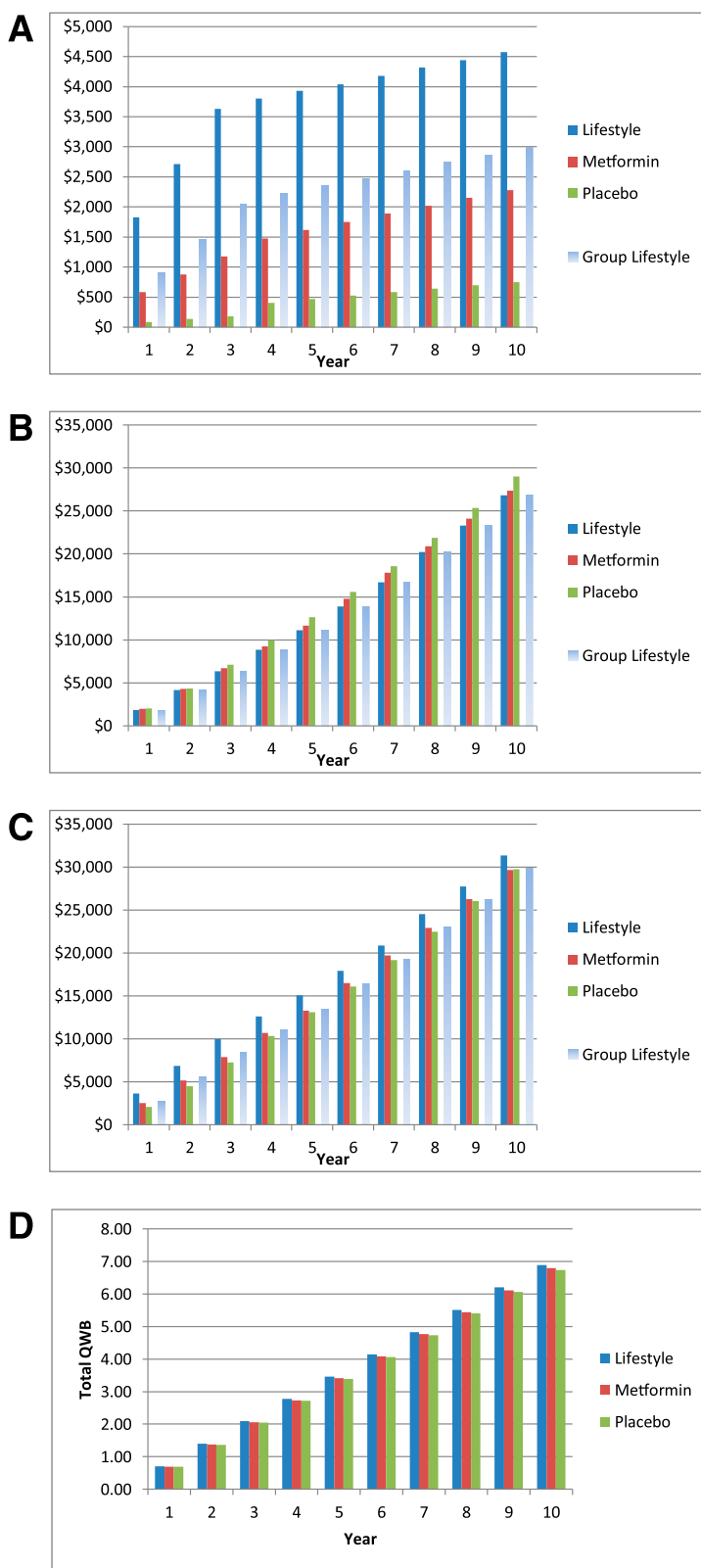
**Table 2—Undiscounted, per capita, direct medical costs of care outside the DPP/DPPOS by intervention group and study year, and distribution of undiscounted, per capita, 10-year, direct medical costs of care outside the DPP/DPPOS by intervention group and type (\$)**

	Lifestyle	Metformin	Placebo
Costs by year			
1-DPP	1,832	1,970	2,004
2-DPP	2,314	2,322	2,346
3-DPP	2,201	2,424	2,731
4 (Bridge)	2,480	2,512	2,868
5-DPPOS	2,297	2,425	2,698
6-DPPOS	2,770	3,116	2,946
7-DPPOS	2,804	3,046	2,990
8-DPPOS	3,537	3,097	3,269
9-DPPOS	3,087	3,191	3,507
10-DPPOS	3,488	3,282	3,648
Total	26,810	27,384	29,007
Costs by category			
Outpatient visits	6,913	7,088	7,359
Inpatient care	7,591	7,596	8,152
Emergency room visits	1,997	1,688	1,822
Urgent care visits	1,685	1,934	1,873
Calls to physicians	721	734	713
Prescription medications	6,588	6,648	7,017
Self-monitoring supplies and laboratory tests for diabetes	1,315	1,696	2,072
Total	26,810	27,384	29,007

**Table 3—Differences in total costs and QALYs and incremental cost-effectiveness ratios\* for lifestyle and metformin versus placebo and lifestyle versus metformin over 10 years from three alternative perspectives**

	Lifestyle vs. placebo	Metformin vs. placebo	Lifestyle vs. metformin	DPP group lifestyle vs. placebo†
Differences in total costs ( $\Delta$ cost)				
Health system perspective <sup>1</sup>				
Undiscounted	\$1,656	−\$251	\$1,908	\$81
Discounted <sup>2</sup>	\$1,748	−\$105	\$1,853	\$201
Modified societal perspective <sup>3</sup>				
Undiscounted	\$3,224	−\$573	\$3,797	\$1,649
Discounted <sup>2</sup>	\$3,202	−\$362	\$3,564	\$1,655
Societal perspective <sup>4</sup>				
Undiscounted	\$2,571	−\$3,644	\$6,215	\$996
Discounted <sup>2</sup>	\$2,688	−\$3,021	\$5,709	\$1,141
Differences in total QALYs ( $\Delta$ QALY)				
Undiscounted	0.15	0.01	0.14	0.15
Discounted <sup>2</sup>	0.14	0.01	0.12	0.14
Incremental cost-effectiveness ratios ( $\Delta$ cost/ $\Delta$ QALY)				
Health system perspective <sup>1</sup>				
Undiscounted	\$10,759	Cost-saving	\$13,469	\$528
Discounted <sup>2</sup>	\$12,878	Cost-saving	\$14,885	\$1,478
Modified societal perspective <sup>3</sup>				
Undiscounted	\$20,942	Cost-saving	\$26,812	\$10,712
Discounted <sup>2</sup>	\$23,597	Cost-saving	\$28,634	\$12,197
Societal perspective <sup>4</sup>				
Undiscounted	\$16,699	Cost-saving	\$43,881	\$6,468
Discounted <sup>2</sup>	\$19,812	Cost-saving	\$45,867	\$8,412

\*Differences in total costs and QALYs and incremental cost-effectiveness ratios are adjusted for survival. †Sensitivity analysis. Assumes that the core curriculum and follow-up visits were conducted as group sessions with 10 participants during the 3 years of DPP. <sup>1</sup>Includes total direct medical costs. <sup>2</sup>Both costs and QALYs discounted at 3%. <sup>3</sup>Includes direct medical costs and direct nonmedical costs excluding participant time. <sup>4</sup>Includes direct medical costs and direct nonmedical costs including participant time.



**Figure 1**—A: Cumulative, undiscounted, per participant, direct medical costs of the DPP/DPPOS interventions by intervention group and study year. B: Cumulative, undiscounted, per participant, direct medical costs of medical care received outside the DPP/DPPOS by intervention group and study year. C: Cumulative, undiscounted, per participant, total direct medical costs of the DPP/DPPOS interventions and medical care received outside the DPP/DPPOS by intervention group and study year. D: Cumulative, undiscounted, per participant, total Quality of Well-Being Index by intervention group and year.