Group visits improved concordance with American Diabetes Association practice guidelines in type 2 diabetes


In uninsured or inadequately insured patients with uncontrolled type 2 diabetes, does healthcare delivery through group visits promote concordance with American Diabetes Association (ADA) standards of care?

METHODS

- **Design:** randomised controlled trial.
- **Allocation:** (concealed)*
- **Blinding:** blinded (outcome assessors).
- **Follow up period:** 6 months of treatment.
- **Setting:** an adult primary care centre at the Medical University of South Carolina, USA.
- **Patients:** 120 uninsured or inadequately insured patients >18 years of age (mean age 54 y, 78% women) who had type 2 diabetes and glycated haemoglobin (HbA1c) >8.5%. Exclusion criteria included a primary diagnosis of substance abuse or dependence, pregnancy, dementia, and inability to speak English.
- **Interventions:** group visits (n = 59) or usual care (n = 61). Group visits were modelled after the Cooperative Health Care Clinics approach. Groups of 19–20 patients were co-led by a primary care physician and a diabetes nurse educator and met monthly for 6 months. Each group visit session lasted 2 hours and consisted of warm up and socialisation (15 min), presentation of a health related topic (30 min), a break (15 min), questions and answers (15 min), and one on one consultation with the physician (30 min). Key preventive measures could be done during group visits. Usual care consisted of seeing a medical professional at least quarterly as recommended by the ADA.
- **Outcomes:** concordance with 10 ADA clinical practice recommendations including up to date HbA1c, and lipid concentrations; urine for microalbumin; use of angiotensin converting enzyme inhibitors, angiotensin receptor blockers, or lipid lowering agents when indicated; daily use of aspirin; annual foot examinations; annual referrals for retrolit examinations; and immunisation against streptococcal pneumonia and influenza.
- **Patient follow up:** 99%.

*Information provided by author.

MAIN RESULTS

Analysis was by intention to treat. The mean total number of ADA clinical practice recommendations met per patient was greater in the intervention group than in the usual care group (8.75 v 7.22, p<0.001). More patients in the intervention group had >8 of the 10 recommendations addressed (table). The groups did not differ for actual HbA1c concentrations or lipid profiles.

CONCLUSION

In uninsured or inadequately insured patients with uncontrolled type 2 diabetes, healthcare delivery through group visits was more effective than usual care for promoting concordance with American Diabetes Association standards of care.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Group visits</th>
<th>Usual care</th>
<th>RBI (95% CI)</th>
<th>NNT (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with ≥8 of 10 process of care indicators addressed</td>
<td>86%</td>
<td>47%</td>
<td>85% (42 to 153)</td>
<td>3 (2 to 5)</td>
</tr>
</tbody>
</table>

*Abbreviations defined in glossary; RBI, NNT, and CI calculated from data in article.