Approaches to and inertia in cardiovascular and renal risk management of Type 2 diabetes patients in primary care: Results from a global quantitative survey

Stephen Brunton¹, Xavier Cos², Gary Deed³, Naresh Kanumilli⁴, Pamela Kushner⁵, Peter Lin⁶, and Johannes Nolte⁷

1. Primary Care Metabolic Group, Los Angeles, CA, USA; 2. Sant Marti de Provençals Primary Care Centres, Institut Català de la Salut, Barcelona, Spain; University Research Institute in Primary Care (IDIAP Jordi Gol), Barcelona, Spain; 3. Chair, Diabetes Specific Interest Network RACGP; Adjunct Senior Research Fellow, Monash University, Melbourne, VIC, Australia; Medical Director, Mediwell, Coorparoo, QLD, Australia; 4. Community Diabetes Consultant, Manchester University Foundation Trust, UK; GPSI Diabetes and Cardiology, Northenden Group Practice, Manchester, UK; 5. Family Medicine, University of California School of Medicine, Irvine, CA, USA; 6. Canadian Heart Research Centre, North York, ON, Canada; 7. Hausärztliche Gemeinschaftspraxis, Köln, Germany

Presented at the American Diabetes Association 80th Scientific Sessions Virtual Conference, June 12th–16th, 2020
DISCLOSURES


This global survey of primary care physicians (PCPs) and primary care diabetes specialists (PCDSs) investigated current approaches to the early cardiovascular (CV) and renal risk management of patients with Type 2 diabetes (T2D), to identify key points of treatment inertia.
BACKGROUND

Cardiovascular disease (CVD) remains the leading cause of death among people with T2D; the risk of CVD and death from CV causes is two to three times higher than in the population without T2D1–4.

For patients in whom first-line metformin monotherapy does not control glucose levels adequately, guidelines recommend that metformin be combined with new second-/third-line therapies, including sodium–glucose co-transporter 2 (SGLT2) inhibitors, glucagon-like peptide-1 (GLP-1) receptor agonists, and dipeptidyl peptidase-4 (DPP-4) inhibitors5,6.

Despite recent recommendations for the use of glucose-lowering therapies with additional CV and renal benefits, as demonstrated through CV outcomes trials (CVOTs), many patients with T2D managed in primary care remain on therapeutic regimens that do not offer benefits beyond glucose lowering7–9.

REFERENCES

METHODS

Study design

Web-based quantitative panel survey of PCPs and PCDSs; conducted in November and December 2019

Inclusion criteria

Seeing T2D patients for >1 year
Saw >20 patients a month
Responsible for T2D diagnosis, treatment initiation, or ongoing management of patients with T2D

Questionnaire

8 screening questions
5 Likert scale questions
3 ranking questions
1 multiple-choice question

Questions covered the current management of patients with T2D, particularly the use of second-/third-line therapies (SGLT2 inhibitors, GLP-1 receptor agonists, and DPP-4 inhibitors)

Included countries

Because PCDSs are commonly or exclusively responsible for the primary care of patients with T2D in Brazil, Germany, and Turkey, PCDSs were recruited in addition to or instead of PCPs in these regions

PCDSs

Brazil (15%)
Germany (15%)
Turkey

PCPs

United Kingdom
Kingdom of Saudi Arabia
Argentina
Australia
Canada
Mexico
Norway
South Korea
Denmark
Egypt
India
Sweden
United Arab Emirates
United States of America

*aParticipant quotas were predefined for each country and the survey was closed when quotas were reached.

DPP-4, dipeptidyl peptidase-4; GLP-1, glucagon-like peptide-1; PCDS, primary care diabetes specialist; PCP, primary care physician; SGLT2, sodium–glucose co-transporter 2; T2D, Type 2 diabetes
Survey completed by 1558 PCPs and 119 PCDSs from 18 countries.

Respondents saw a mean of 132 patients with T2D per month and had treated patients with T2D for 17 years.

73% PCPs and 72% PCDSs were responsible for second-/third-line treatment initiation.

Responsibilities of respondents for T2D patient care:

- **Diagnosis**
  - 178 PCPs (10.6%)
  - 165 PCDSs (9.8%)
  - 55 (3.3%)
  - 96 (5.7%)
  - 96 (5.7%)

- **Treatment initiation**
  - 178 PCPs (10.6%)
  - 162 PCDSs (9.7%)
  - 162 (9.7%)

- **Ongoing management**
  - 798 PCPs (47.6%)
  - 223 PCDSs (13.3%)

PCDS, primary care diabetes specialist; PCP, primary care physician; T2D, Type 2 diabetes
agreed that early intensification to second-/third-line therapies in accordance with clinical guidelines is associated with clinically relevant benefits.

reported that their own clinical experience was a very important source of guidance for daily treatment decisions.

RESULT: TREATMENT DECISIONS

81% of PCPs and 87% of PCDSs

72% of PCPs and 65% of PCDSs

PCDS, primary care diabetes specialist; PCP, primary care physician
RESULTS – BARRIERS TO PRESCRIPTION

<table>
<thead>
<tr>
<th>'Great' barriers</th>
<th>'Moderate' barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>The local healthcare system / insurance companies restrict access to these therapies</td>
<td>21%</td>
</tr>
<tr>
<td>A lack of interest in their condition leads most patients to delay appointments or ignore them all together</td>
<td>16%</td>
</tr>
<tr>
<td>Owing to administrative and healthcare system restraints, maintaining regular appointments with patients can lead to treatment inertia</td>
<td>17%</td>
</tr>
<tr>
<td>Guidelines are not clear about which patients these treatments are specifically for</td>
<td>10%</td>
</tr>
<tr>
<td>I am concerned about the side effect profile of these therapies</td>
<td>18%</td>
</tr>
<tr>
<td>These therapies are not as easy to initiate as other therapies</td>
<td>16%</td>
</tr>
<tr>
<td>Guidelines are not clear about how best to intensify a patient’s treatment with these therapies</td>
<td>16%</td>
</tr>
<tr>
<td>I don’t have enough experience in prescribing and managing newer Type 2 diabetes therapies</td>
<td>11%</td>
</tr>
</tbody>
</table>
RESULTS – CVOT DATA AND CV RISK

- **68% PCPs** and **52% PCDSs** were aware of data published from recent CVOTs.
- **48% PCPs** and **46% PCDSs** felt that the clinical implications of these trials were unclear.
- **71% PCPs** and **69% PCDSs** believed that CVOT data demonstrated SGLT2 inhibitors and GLP-1 receptor agonists to have CV and renal benefits beyond glucose lowering.
- **47% PCPs** and **39% PCDSs** tend to reserve SGLT2i and GLP-1 receptor agonist treatments for later lines of therapy.
- **68% PCPs** and **58% PCDSs** had changed their treatment decisions based on these trials.
- **23% PCPs** and **29% PCDSs** would maintain current therapies in a well-controlled patient, despite increased patient CV risk.

CV, cardiovascular; CVOT, cardiovascular outcomes trial; GLP-1, glucagon-like peptide-1; PCDS, primary care diabetes specialist; PCP, primary care physician; SGLT2, sodium-glucose co-transporter 2.
CONCLUSIONS

Significant barriers still prevent the optimization of T2D patient care in the primary setting, including:

- Limited familiarity of PCPs and PCDSs with new CVOT data
- Treatment inertia
- Access restrictions for second-/third-line treatments

ACKNOWLEDGMENTS

This study was funded by AstraZeneca. We would like to thank Derah Saward-Arav, integrated medhealth communication (imc) for medical writing support, and Alma Aceituno Herrera, imc, for graphical design assistance, funded by AstraZeneca.

CVOT, cardiovascular outcomes trial; PCDS, primary care diabetes specialist; PCP, primary care physician; T2D, Type 2 diabetes