Improving Patient Understanding of Type 2 Diabetes and the Benefits of the Multidisciplinary Team Approach
Aims

Provide practical guidance on improving diabetes care through highlighting the need for:

• increased patient understanding of type 2 diabetes and the importance of reaching glycemic goals

• shared responsibility/common philosophy for achieving glycemic goals

• a multidisciplinary team approach to treating type 2 diabetes
Majority of type 2 diabetes patients are not at HbA$_{1c}$ goal

**US$^1$**

- $< 7\%$: 36\%
- $\geq 7\%$: 64\%

**EU$^2$**

- $\leq 6.5\%$: 31\%
- $> 6.5\%$: 69\%

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Reaching glucose goals is important to reduce microvascular complications

Retinopathy and nephropathy \(^1–4\)
- present in \(\sim 1 \text{ in } 5\) patients at diagnosis
- leading causes of blindness and end-stage renal disease

Neuropathy
- present in \(\sim 1 \text{ in } 8\) patients at diagnosis \(^1\)
- affects \(\sim 70\%\) of people with diabetes \(^5\)
- a leading cause of non-traumatic lower extremity amputation \(^6\)

Reaching glucose goals is important to reduce macrovascular complications

Overall, **75%** of people with type 2 diabetes die from cardiovascular disease\(^1,2\)


Barriers to achieving good glycemic control

Need for shared understanding and mutual agreement regarding good glycemic control among members of the multidisciplinary team
Considering the patient perspective

- I am anxious that my therapy will cause side effects
- Why is lowering blood glucose so important?
- What happens if I forget to take my medication on a regular basis?
- I am afraid of the unknown
- I have no symptoms so how can my condition be serious?
- I am afraid of needing insulin
- What if my therapy fails?
Some misconceptions about diabetes

“I don’t need to take my tablets – I don’t feel ill”

“Only old people get diabetes”

“Complications only occur in patients who take insulin”
Challenges in improving patient understanding

- **35%** recalled receiving advice about their medication
- **15%** knew the mechanism of action of their therapy
- **10%** taking sulfonylureas knew that they could cause hypoglycemia
- **20%** taking metformin knew it could cause gastrointestinal side effects

Patient knowledge of oral antidiabetic agents

Challenges in increasing adherence

Patient adherence to therapy

- 62% took tablets correctly in relation to food
- 20% regularly forgot to take their tablets
- 5% omitted tablets if their blood glucose was too high
- 2% omitted tablets if their blood glucose was too low

Need for shared responsibility/ common philosophy for achieving glycemic goals
Establish a partnership between patient and healthcare professional

Establish rapport

Agree mutual agenda

Work together to:

Discuss importance of implementing change

Build confidence that change is possible

Reduce resistance to change

Exchange information
The need to establish a good rapport

“My healthcare professional has helped me understand my blood glucose results and the importance of regular testing. I feel more in control of my diabetes”

“I don’t really monitor my blood glucose levels. It doesn’t seem that important. The physician never asks me my numbers or measurements, so why am I doing it?”
Motivating patients to achieve and maintain glycemic control

“I’ve reached my glucose target by eating properly, exercising more and taking my tablets”

“This is great news. Continue with the good work and keep your blood sugar under control – you’ll feel better for it!”

Use a patient-centered approach

Healthcare professional

- Active listening
- Negotiation
- Provides information (when required)

Patient

- Active
- Expresses views
- In control
- Decision maker

INFORMATION EXCHANGE

Initial consultation: where to start?

- What does type 2 diabetes mean:
  - to you?
  - to your family/friends?
- What are your fears/expectations?
- How will type 2 diabetes affect:
  - your everyday life?
  - your family?
  - your job?
  - your social life?
- What can we do about it together?
Subsequent consultations

• How are you?
• Have you been regularly monitoring sugar levels?
• You are not yet at goal – how can I help?
• Discuss options and reach mutual decision
• Agree when and how to review options
• Apart from diabetes, what else is new?
Helping patients to accept their condition

Diagnosis of type 2 diabetes = loss of patient’s accustomed state of health

Patient’s willpower and ability to improve outcomes depend on degree of acceptance of the serious nature of their condition

Relationship between healthcare professional and patient is critical in this process

Motivating and supporting patients to change their lifestyle

- Provide practical and realistic advice on implementing and sustaining lifestyle change
- Discuss steps that can be implemented *now*
- Where possible, involve other members of the diabetes care team, particularly family and friends
Role of the multidisciplinary team
The multidisciplinary team: core members

- Physician
- Diabetes specialist nurse
- Patient
- Dietician
- Podiatrist

The multidisciplinary team: additional members

- Physician
- Diabetologist/endocrinologist
- Dietician
- Diabetes specialist nurse
- Podiatrist
- Pharmacist
- Other specialists

Patient

Key function of the multidisciplinary team

To provide:

Continuous, accessible and consistent care focused on the needs of individuals with type 2 diabetes
Additional functions of a multidisciplinary team

• Provide input at diagnosis of condition and continually thereafter to:
  – agree standards of care
  – discuss rational therapeutic suggestions
  – monitor guideline adherence and short-term outcomes
  – avoid early complications or provide timely intervention to decrease diabetes-related complications

• Enable long-term patient self-management

The multidisciplinary team requires

- Common goals
- Supportive/nurturing approach
- Commitment to principles of self care
- Good interpersonal skills of team members
- Clear definition of specific and shared responsibilities of team
- Tailoring of team members according to setting and resources
The multidisciplinary team: shared responsibility for education
Impact of implementing an educational program via a multidisciplinary team

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>TIME PERIOD AFTER ATTENDING EDUCATION COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0 MONTHS</td>
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<tr>
<td>FPG (mmol/L)</td>
<td>10.2</td>
</tr>
<tr>
<td>HbA$_{1c}$ (%)</td>
<td>8.9</td>
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<tr>
<td>Body weight (kg)</td>
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<tr>
<td>Systolic BP (mmHg)</td>
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<tr>
<td>Diastolic BP (mmHg)</td>
<td>95.0</td>
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<tr>
<td>Cholesterol (mmol/L)</td>
<td>6.2</td>
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<tr>
<td>Triglycerides (mmol/L)</td>
<td>2.8</td>
</tr>
</tbody>
</table>

*Significant improvement versus 0 months

Impact of a multidisciplinary team on glycemic control and hospital admissions

A multidisciplinary team can reduce costs

Other benefits of a multidisciplinary team approach to type 2 diabetes care

- Improved glycemic control \(^1,^2\)
- Improved quality of life \(^1\)
- Increased patient follow-up \(^1\)
- Higher patient satisfaction \(^1\)
- Lower risk of complications \(^2\)
- Decreased healthcare costs \(^2\)

\(^2\)Gagliardino JJ & Etchegoyen G. Diabetes Care 2001; 24:1001–1007.
How can expertise be best utilized in diabetes management?

The Global Partnership recommends:

Implement a multi- and interdisciplinary team approach to diabetes management to encourage patient education and self-care and share responsibility for patients achieving glucose goals.