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

International Diabetes Federation

FEND
Federation of European Nurses in Diabetes

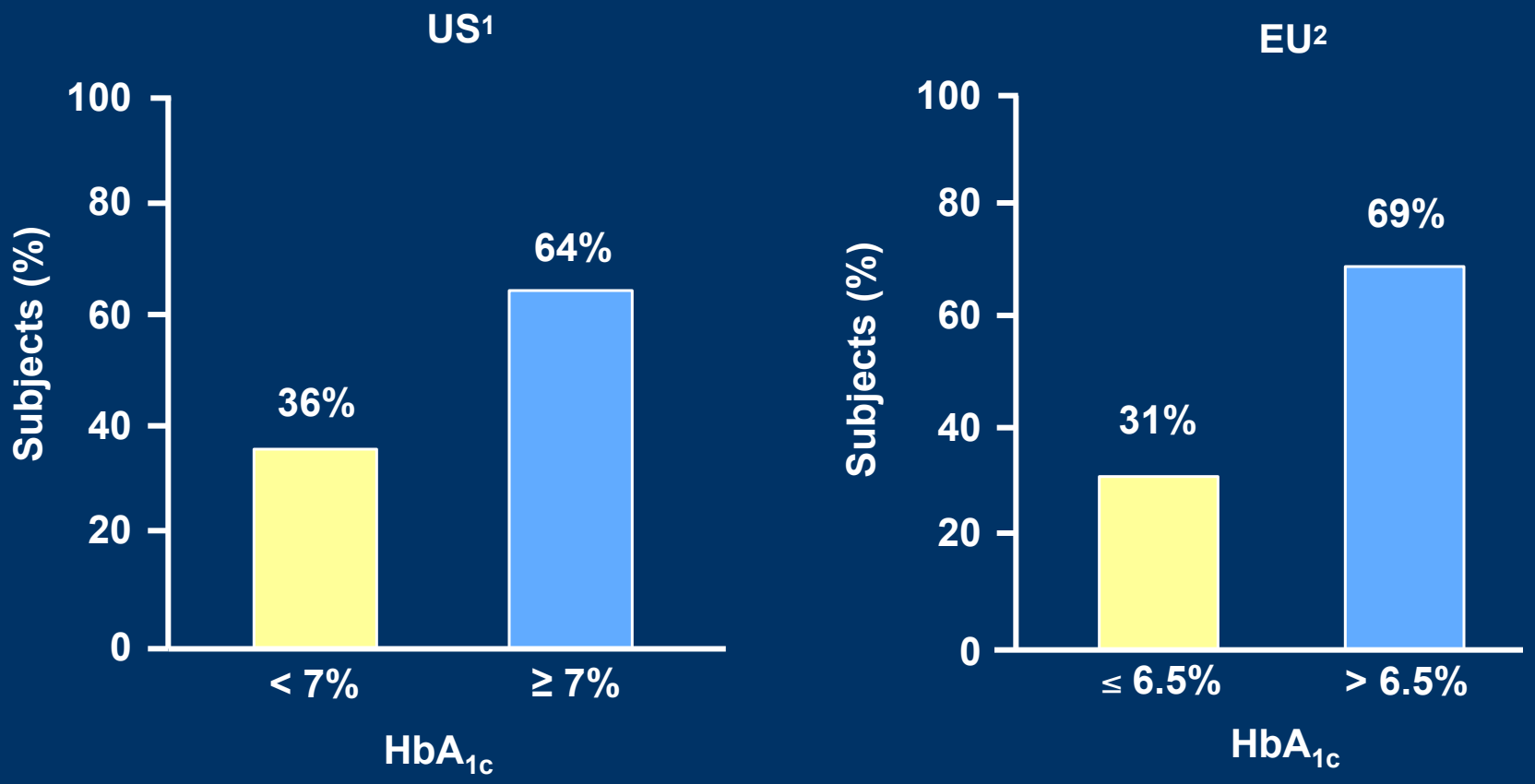
CONTROL TO GOAL

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

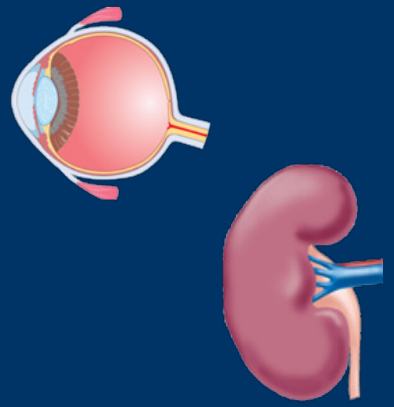
Majority of type 2 diabetes patients are not at HbA_{1c} goal



[1]Koro CE, *et al. Diabetes Care* 2004; 27:17–20.
[2]Liebl A. *Diabetologia* 2002; 45:S23–S28.

Reaching glucose goals is important to reduce microvascular complications

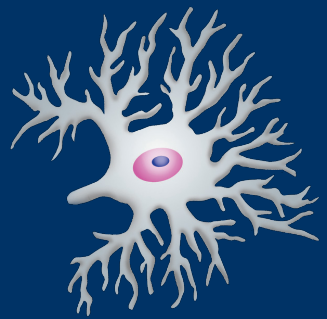
Retinopathy and nephropathy[1–4]



- present in **~1 in 5** patients at diagnosis
- leading causes of blindness and end-stage renal disease

Neuropathy

- present in **~1 in 8** patients at diagnosis[1]
- affects **~70%** of people with diabetes[5]
- a leading cause of non-traumatic lower extremity amputation[6]



[1]UK Prospective Diabetes Study Group. *Diabetes Res* 1990; 13:1–11. [2]Fong DS, *et al. Diabetes Care* 2003; 26 (Suppl. 1):S99–S102.
[3]The Hypertension in Diabetes Study Group. *J Hypertens* 1993; 11:309–317. [4]Molitch ME, *et al. Diabetes Care* 2003; 26 (Suppl. 1):S94–S98.
[5]King's Fund. *Counting the cost. The real impact of non-insulin dependent diabetes.* British Diabetic Association, 1996.
[6]Mayfield JA, *et al. Diabetes Care* 2003; 26 (Suppl. 1):S78–S79.

Reaching glucose goals is important to reduce macrovascular complications

Overall, **75%** of people with type 2 diabetes die from cardiovascular disease[1,2]

[1]Gray RP & Yudkin JS. Cardiovascular disease in diabetes mellitus. In *Textbook of Diabetes* 2nd Edition, 1997. Blackwell Sciences.

[2]Kannel WB, *et al. Am Heart J* 1990; 120:672–676.

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

What if my therapy fails?

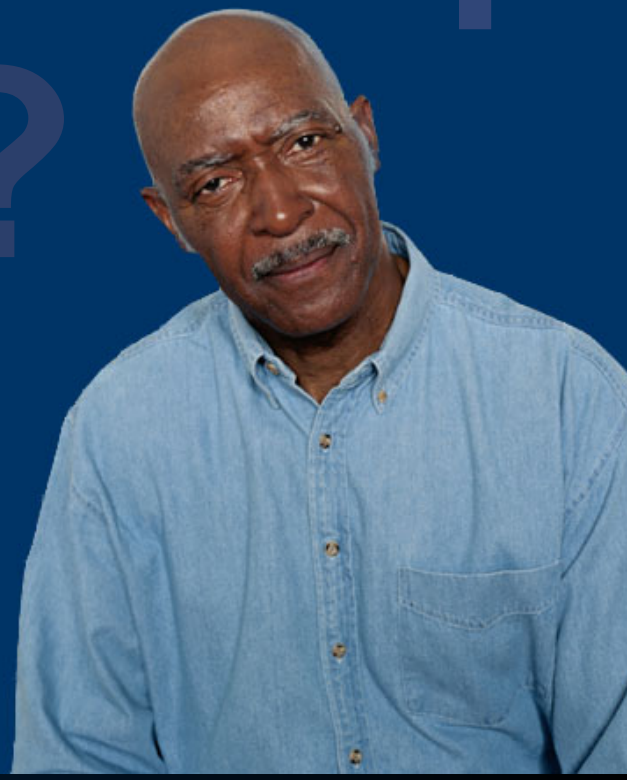
Why is lowering blood glucose so important?

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?

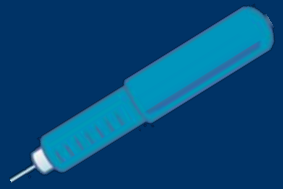
I am afraid of needing insulin



Some misconceptions about diabetes

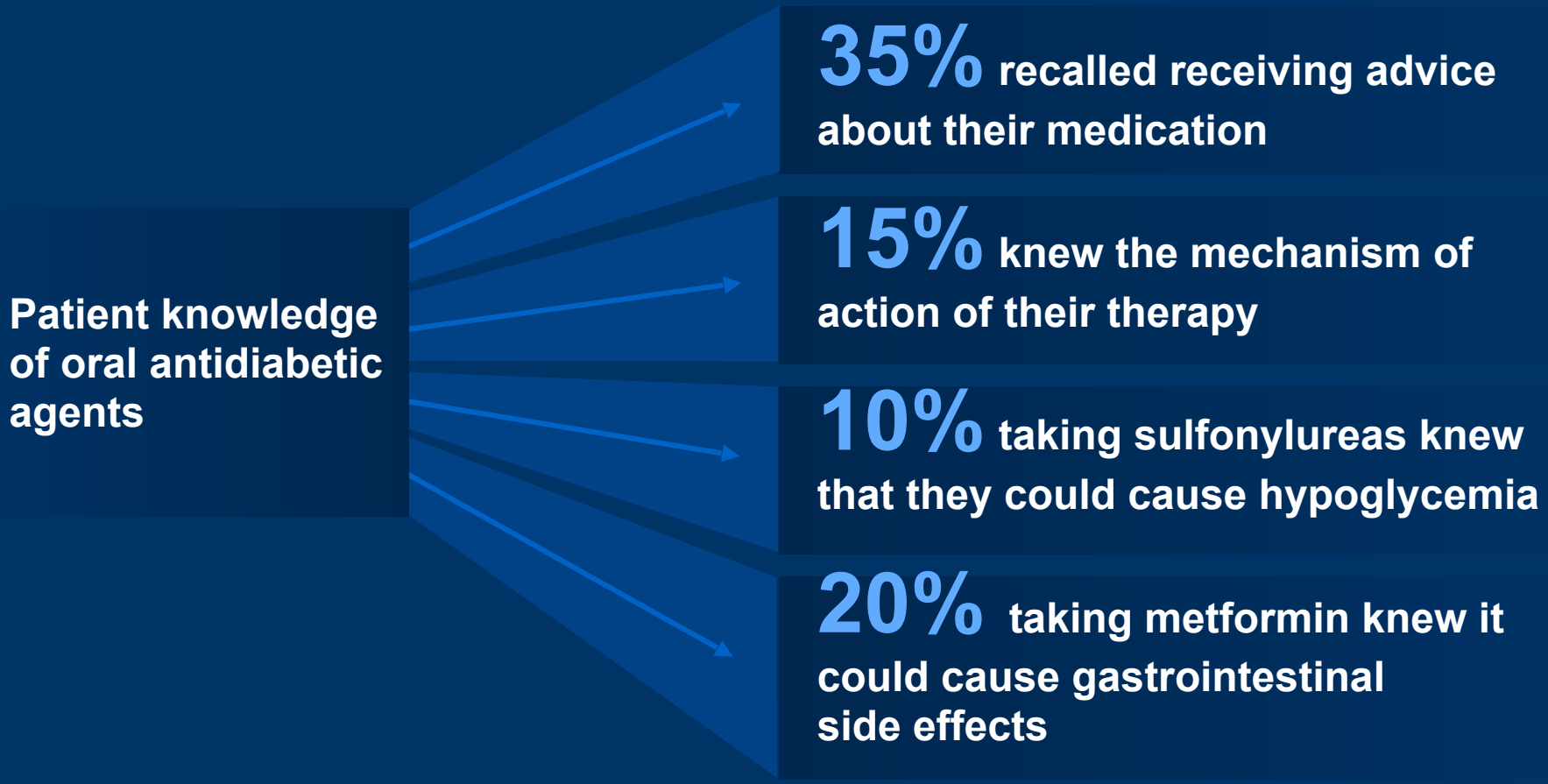
"Only old people get diabetes"

"I don't need to take my tablets – I don't feel ill"



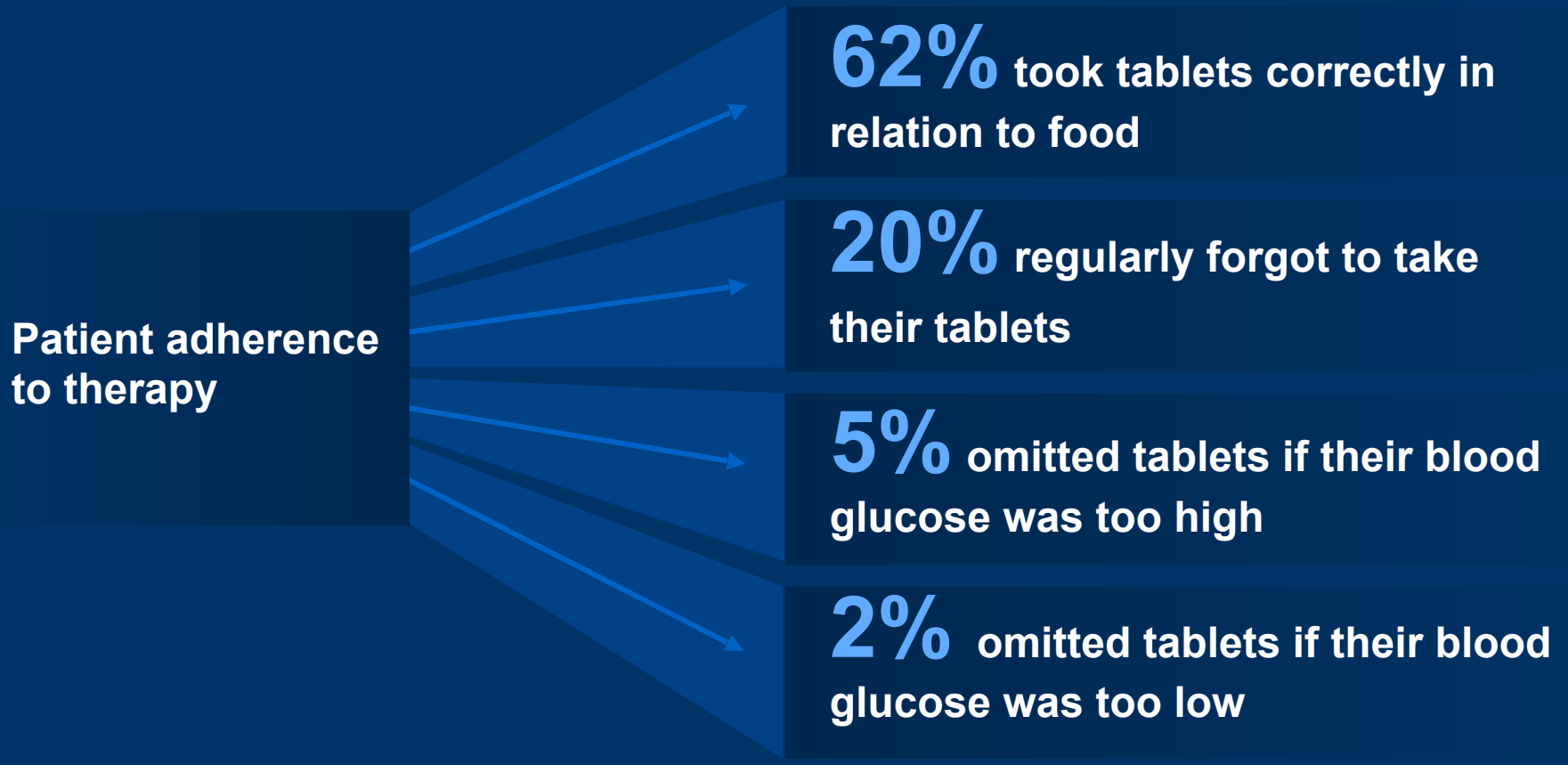
"Complications only occur in patients who take insulin"

Challenges in improving patient understanding



Browne DL, *et al. Diabet Med* 2000; 17:528–531.

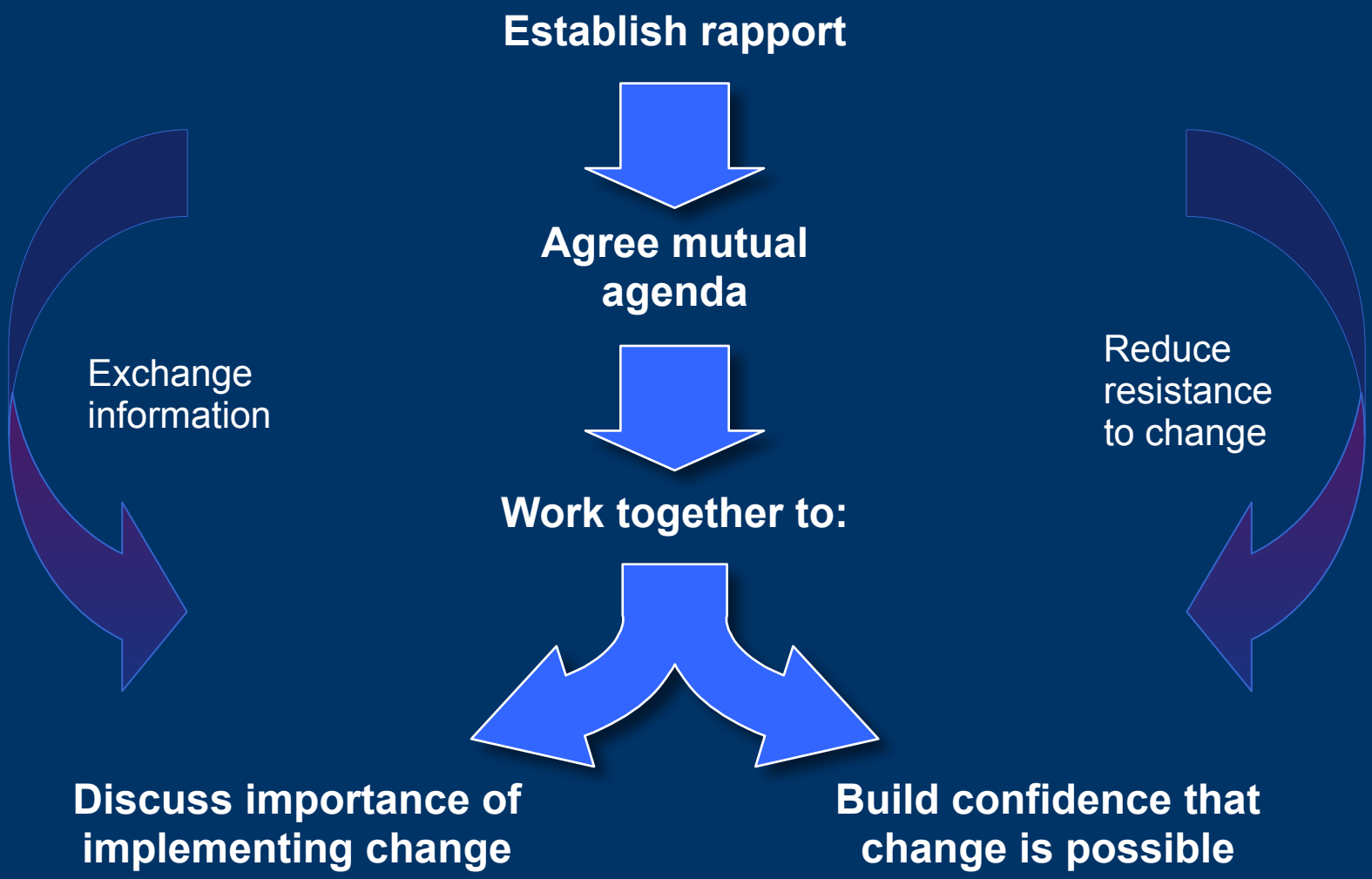
Challenges in increasing adherence



Browne DL, *et al. Diabet Med* 2000; 17:528–531.

Need for shared responsibility/ common philosophy for achieving glycemic goals

Establish a partnership between patient and healthcare professional



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!"

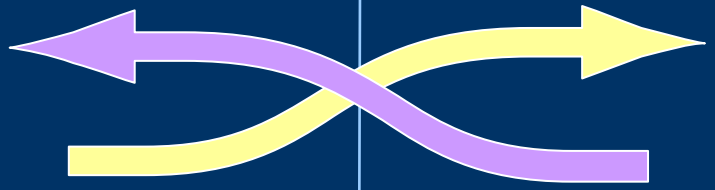
Heisler M, *et al. Diabetes Care* 2005; 28:816–822.

Use a patient-centered approach

Healthcare professional

Patient

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



INFORMATION EXCHANGE

- **Active**
- **Expresses views**
- **In control**
- **Decision maker**

Muhlhauser I, *et al. Diabet Med* 2000; 17:823–829.

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

Lacroix A, *et al. Schweiz Rundsch Med Prax* 1993; 82:1370–1372.

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

National Diabetes Education Program. *Team care: comprehensive lifetime management for diabetes*. http://www.ndep.nih.gov/resources/health.htm.

The multidisciplinary team: additional members

National Diabetes Education Program. *Team care: comprehensive lifetime management for diabetes*. http://www.ndep.nih.gov/resources/health.htm.

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

Codispoti C, *et al. J Okla State Med Assoc* 2004; 97:201–204.

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

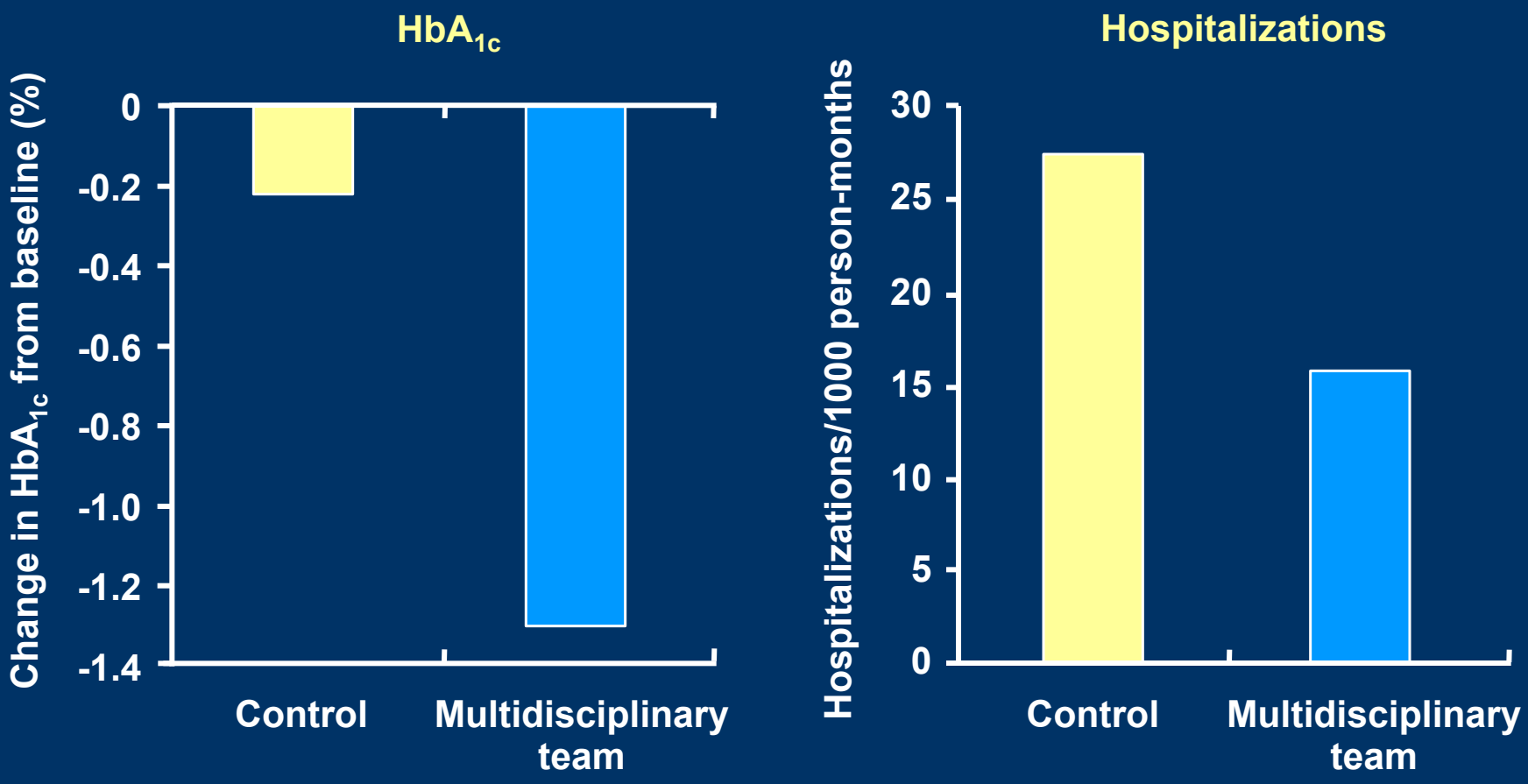
Impact of implementing an educational program via a multidisciplinary team

VARIABLE	TIME PERIOD AFTER ATTENDING EDUCATION COURSES	
	0 MONTHS	12 MONTHS
FPG (mmol/L)	10.2	8.7*
HbA_{1c} (%)	8.9	7.8*
Body weight (kg)	83.0	81.0*
Systolic BP (mmHg)	154.0	143.0*
Diastolic BP (mmHg)	95.0	87.0*
Cholesterol (mmol/L)	6.2	5.4*
Triglycerides (mmol/L)	2.8	2.1*

*Significant improvement versus 0 months

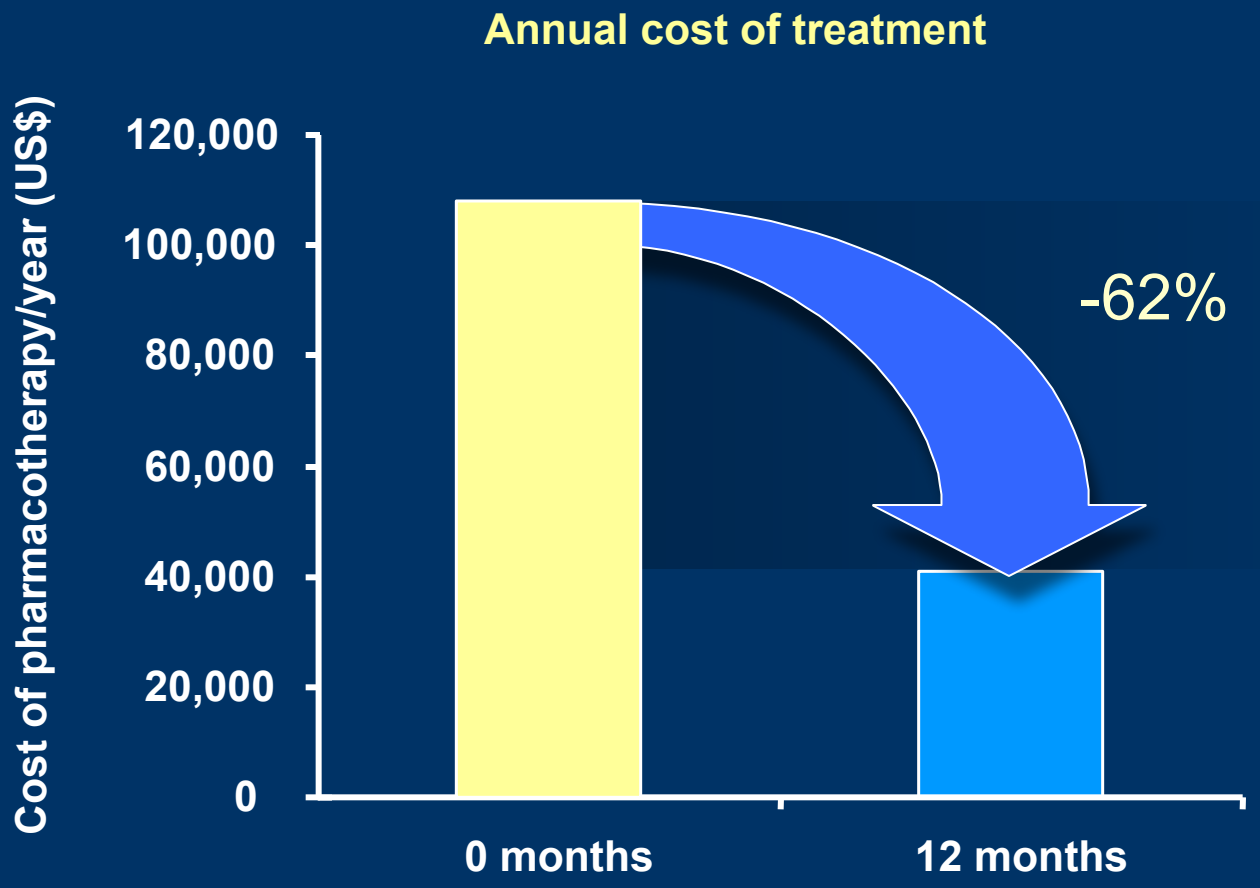
Gagliardino JJ & Etchegoyen G. *Diabetes Care* 2001; 24:1001–1007.

Impact of a multidisciplinary team on glycemic control and hospital admissions



Sadur CN, *et al. Diabetes Care* 1999; 22:2011–2017.

A multidisciplinary team can reduce costs



Gagliardino JJ & Etchegoyen G. *Diabetes Care* 2001; 24:1001–1007.

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]

[1]Codispoti C, *et al. J Okla State Med Assoc* 2004; 97:201–204.

[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

Del Prato S, *et al. Int J Clin Pract* 2005; 59:1345–1355.