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Institut für
Gesundheitsökonomie und
Klinische Epidemiologie



The German Disease Management Programs and Patient Outcome

<March 02 2010> | <PD Dr. med. Stephanie Stock, health economist (ebs)>



The Burden of Chronic Disease

2004 Disease or injury	As % of total DALYs	Rank		Rank	As % of total DALYs	2030 Disease or injury
Lower respiratory infections	6.2	1		1	6.2	Unipolar depressive disorders
Diarrhoeal diseases	4.8	2		2	5.5	Ischaemic heart disease
Unipolar depressive disorders	4.3	3		3	4.9	Road traffic accidents
Ischaemic heart disease	4.1	4		4	4.3	Cerebrovascular disease
HIV/AIDS	3.8	5		5	3.8	COPD
Cerebrovascular disease	3.1	6		6	3.2	Lower respiratory infections
Prematurity and low birth weight	2.9	7		7	2.9	Hearing loss, adult onset
Birth asphyxia and birth trauma	2.7	8		8	2.7	Refractive errors
Road traffic accidents	2.7	9		9	2.5	HIV/AIDS
Neonatal infections and other ^a	2.7	10		10	2.3	Diabetes mellitus
COPD	2.0	13		11	1.9	Neonatal infections and other ^a
Refractive errors	1.8	14		12	1.9	Prematurity and low birth weight
Hearing loss, adult onset	1.8	15		15	1.9	Birth asphyxia and birth trauma
Diabetes mellitus	1.3	19		18	1.6	Diarrhoeal diseases



The Burden of Chronic Disease



World Health Organization
Regional Office for Europe

Press release EURO 16/04
Copenhagen, 21 October 2004

Largely preventable chronic diseases cause 86% of deaths in Europe: 53 WHO European Member States map a strategy to curb the epidemic

Press Release EURO/05/06
Copenhagen, 11 September 2006

Aware of the rising costs and burden of chronic disease, countries across the WHO European Region are taking a comprehensive approach to curbing the epidemic. As many chronic diseases are closely linked to lifestyles, an estimated 80% of heart disease, stroke and type 2 diabetes, and 40% of cancer, could be avoided if common lifestyle risk factors were

Research in Chronic Care: Conclusions

- Health care delivery systems are designed for acute care
- Chronic care delivery is a pattern of over-, under-, and misuse
- Self-management is key in chronic care to achieve optimal Outcomes
- Prevalence and cost of chronic disease are a time bomb for health care systems of all industrialized nations





Why Disease Management?

„Disease Management is the only remaining strategy to deal with chronic diseases...

Perhaps the greatest contribution of Disease Management lies in the fact that it has the potential to drive change in the way we approach healthcare.

As a new concept in healthcare delivery, Disease Management is pushing the envelope in how we manage Chronic Disease.“

Warren Todd
Executive Director,
Past President, and
founding Board Member
of the Disease Management
Association of America (DMAA)

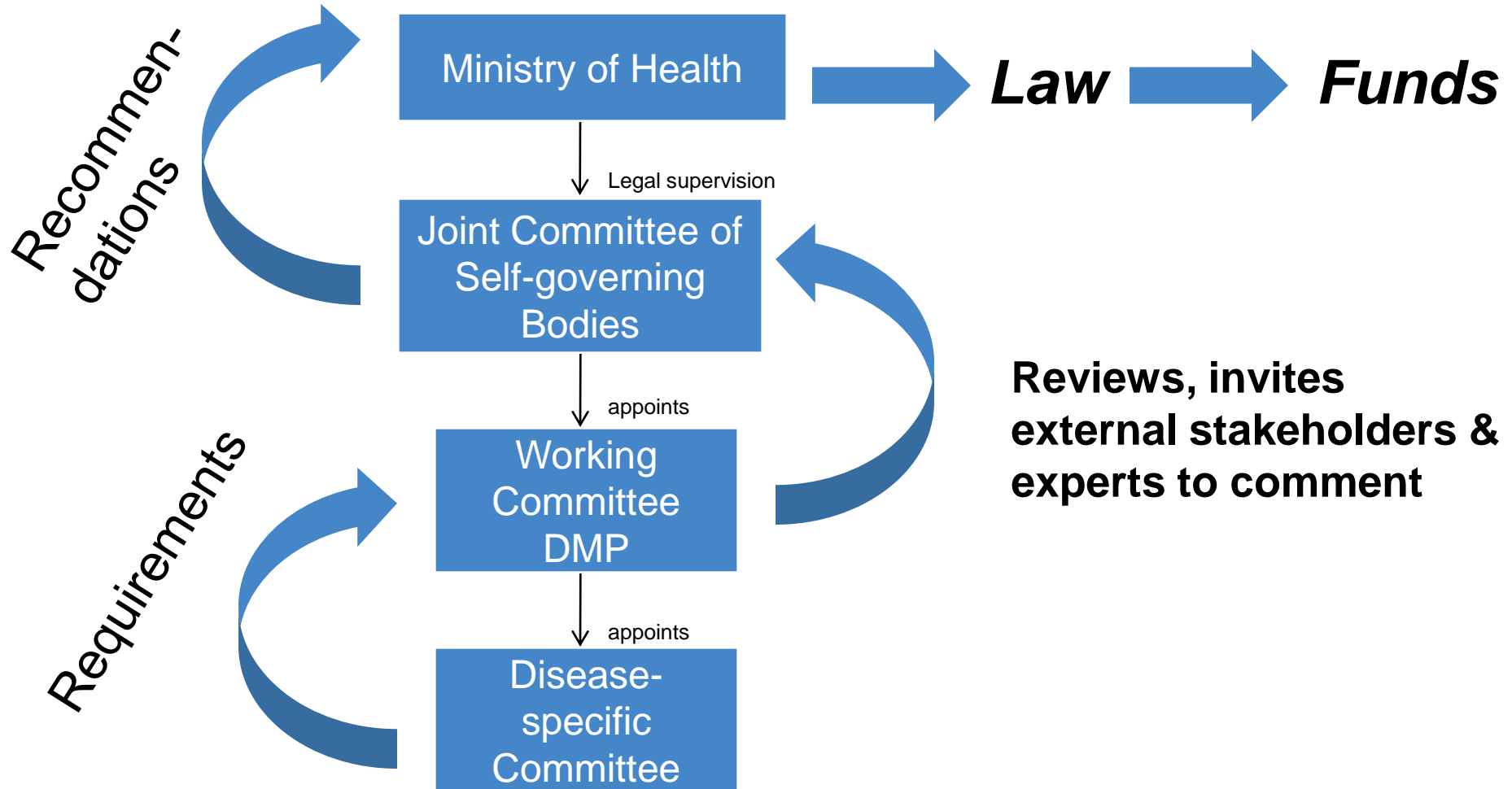
Goals in German DMP legislation



...to integrate health care
delivery for chronic care

...to optimize quality of
chronic care

The Road to DMPs in Germany

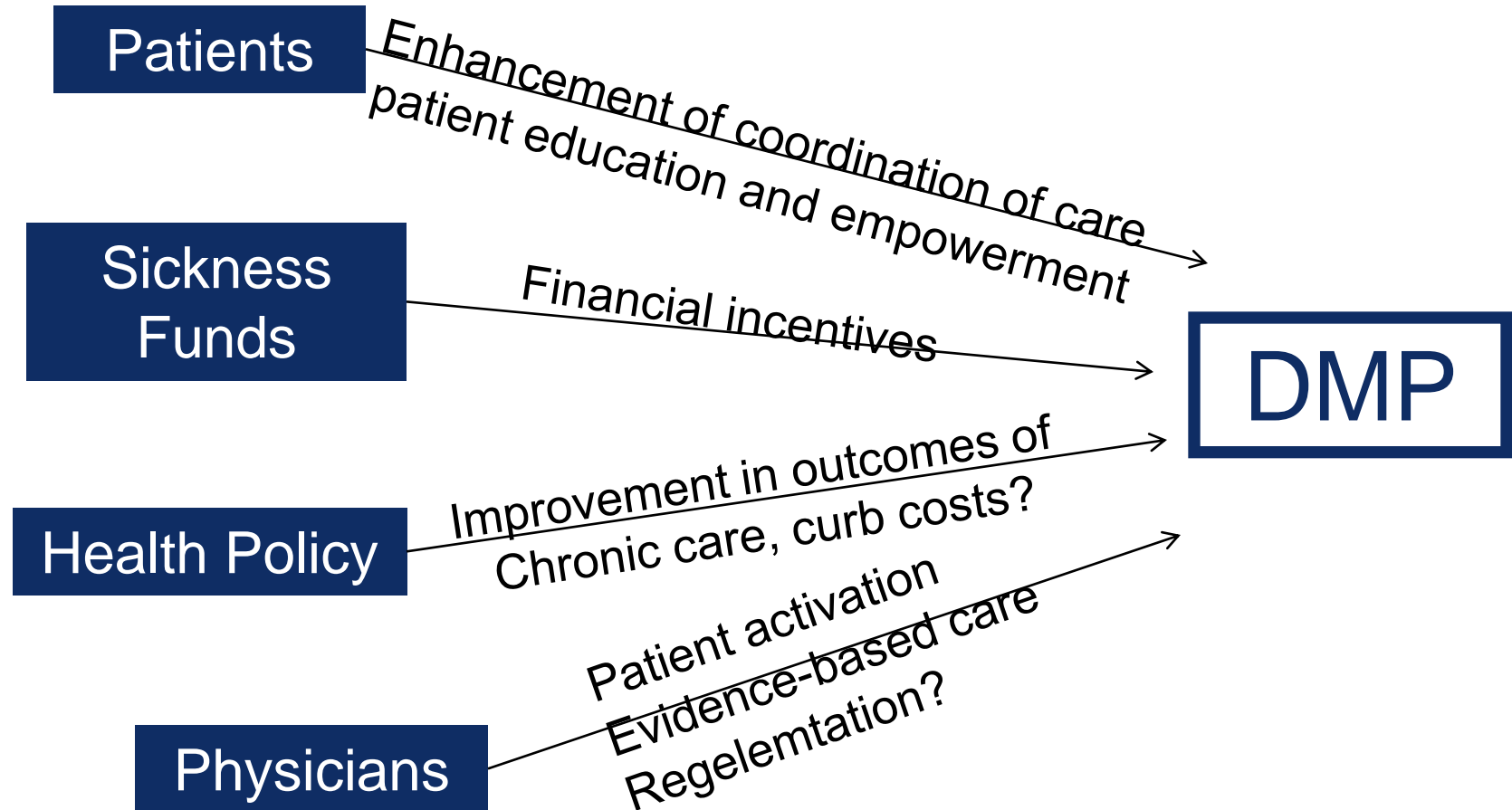




Components of German DMPs

Component	Description
Evidence- based guidelines	Mandatory basis for national care goals, treatment recommendations, physician and patient education, quality improvement networks, feedback and reminders
Use of information technology systems	Information technology (IT) has successfully been introduced over the past years. It allows routine documentation of a national data set in the physician office, creates a patient registry, allows the individual physician to track and monitor chronically ill patients with respect to outcomes and process parameters, and allows evaluation, feedback, benchmarking, and the generation of reminders for physicians and patients
Physician-based	The programs are mainly the responsibility of primary care physicians. They enroll and educate patients, negotiate individual treatment goals and co-ordinate care. Physicians may delegate these tasks to trained office staff. Quality assurance includes individual physician feedback and benchmark reports every six months, individual physician and patient reminders every three months, and participation in quality improvement circles. There are financial incentives for physicians to participate in the programs
Patient activation	Patient activation includes: Patient education through physicians and qualified nurses and patient information via brochures and hotlines provided by sickness funds. Individualized care plans and individualized care goals are negotiated between physicians and patients; There are financial incentives for patients
Population based and prevention oriented	Ca. 90% of the population (= all statutory health insured) have access to DM programs if they are eligible. Programs are uniform regarding quality standards, national care goals and underlying evidence-based treatment recommendations, mandatory evaluation requirements and quality assurance measures. All patients are encouraged to enroll, no high-risk approach. The focus of the programs is on secondary prevention. Programs may differ in service aspects

Stakeholder Expectations



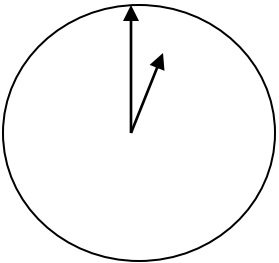


Hallmarks of German DMPs

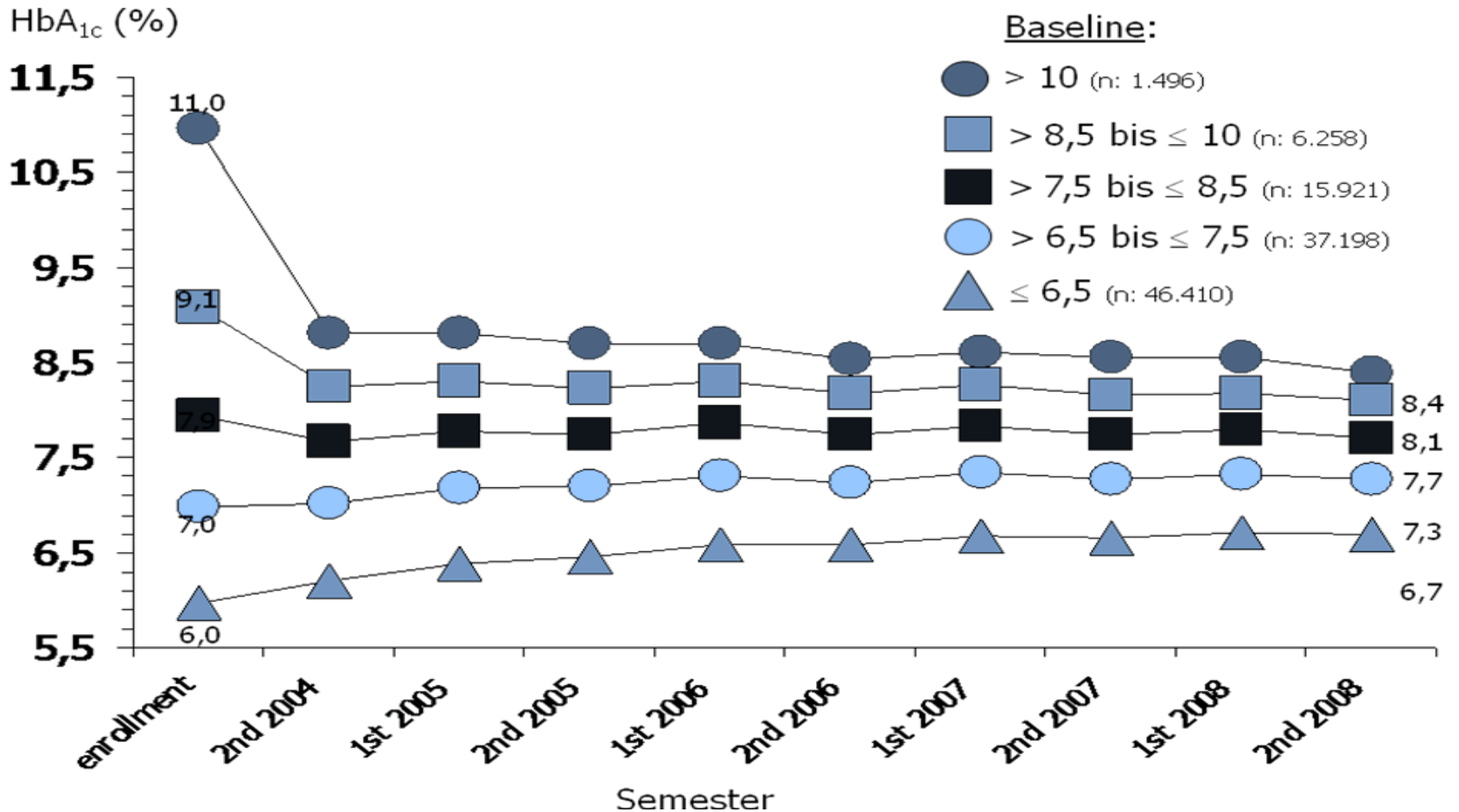
- **Physician-based**
Enrollment and coordination of care, documentation, financial incentives, education, feed-back
- **Patient-centered**
Education, financial incentives, shared decision making and treatment plans, voluntary enrollment
- **Quality-targeted**
Evidence based treatment guidelines, national care targets, accreditation process, quality management, evaluation, publication of results mandatory
- **Nationally implemented**
Consensus-process
- **Financial incentives**

Patient Activation in German DMPs

- ✓ Patient education
- ✓ Quality assured and accredited patient education programs
- ✓ individualized care plans
- too little focus on behavioural change techniques & cognitive theories
- no long-term support strategy
- no additional self-management support

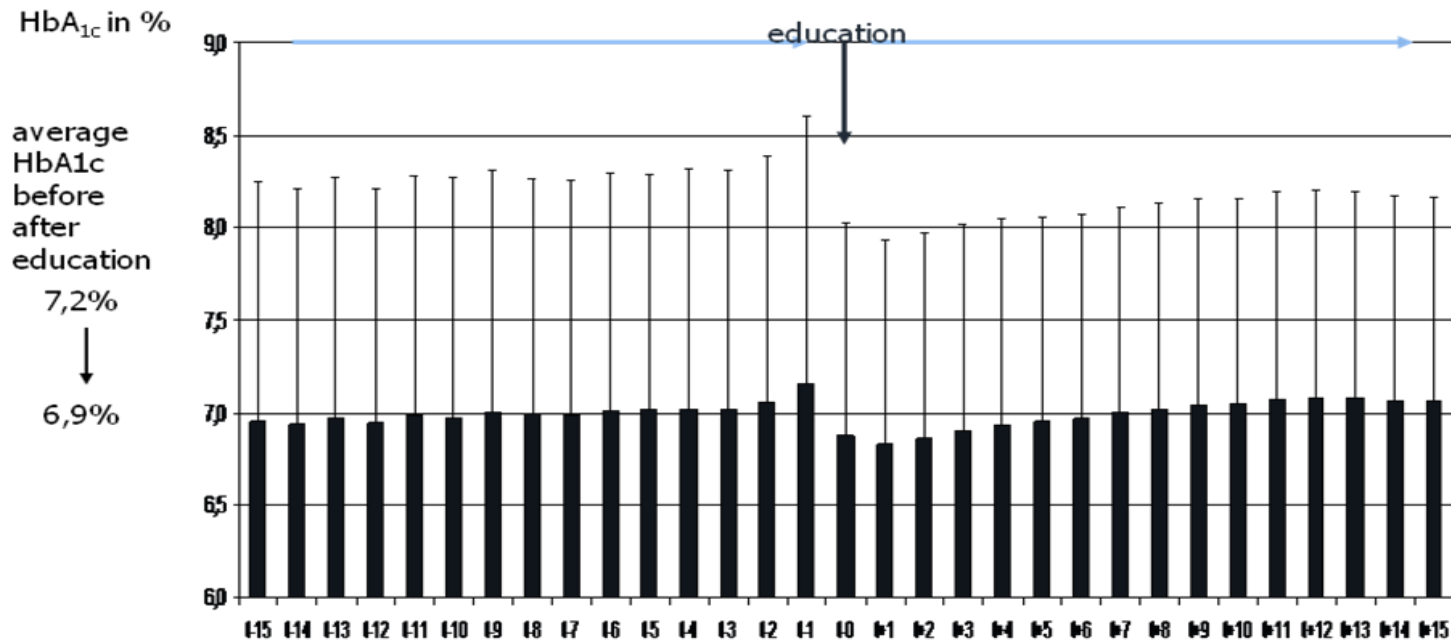


Results of German DMPs: changes in HbA1c levels



Results of German DMPs

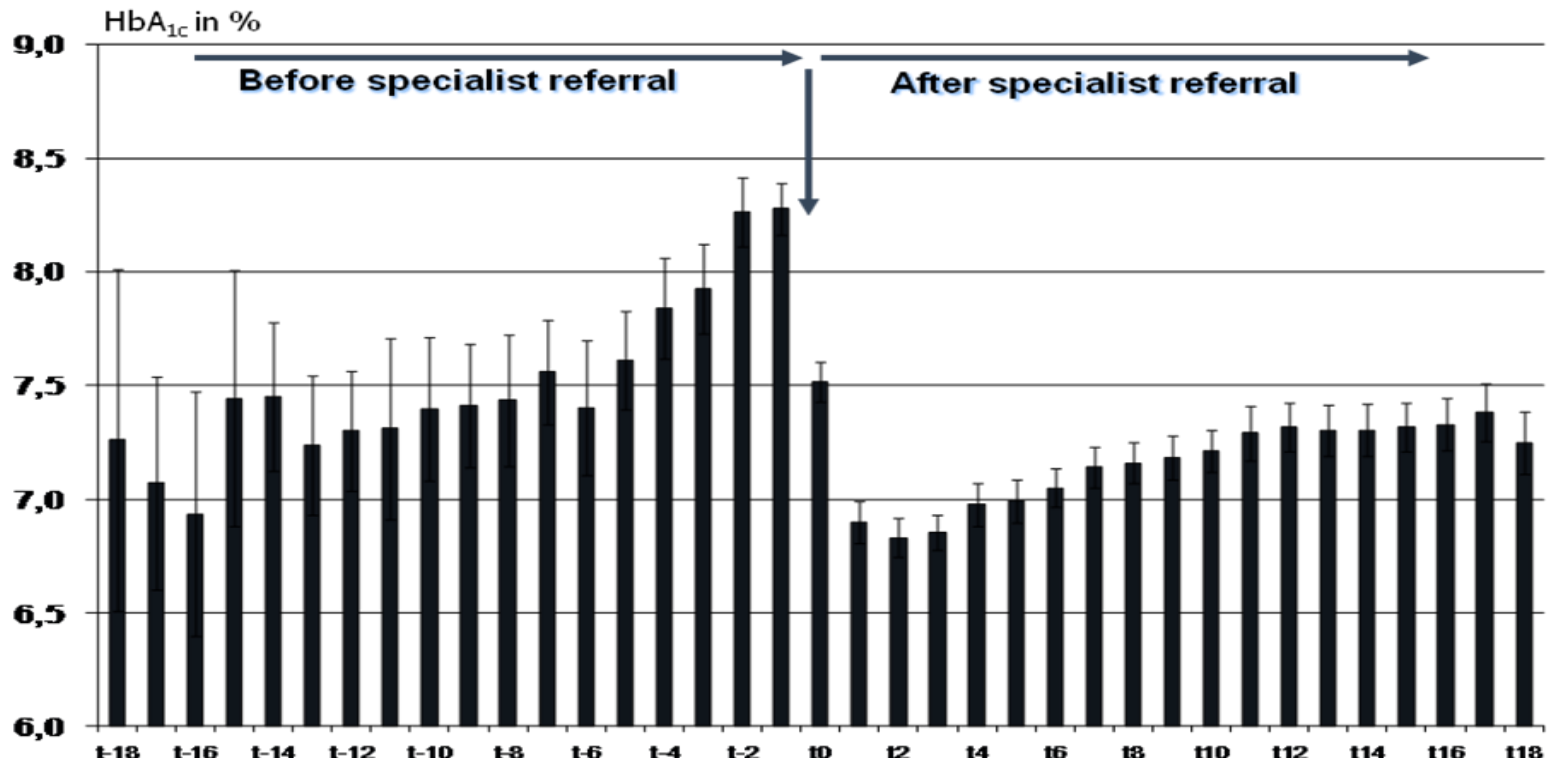
DMP North Rhine: Changes in HbA_{1c} of Type 2-diabetes patients before and after structured education



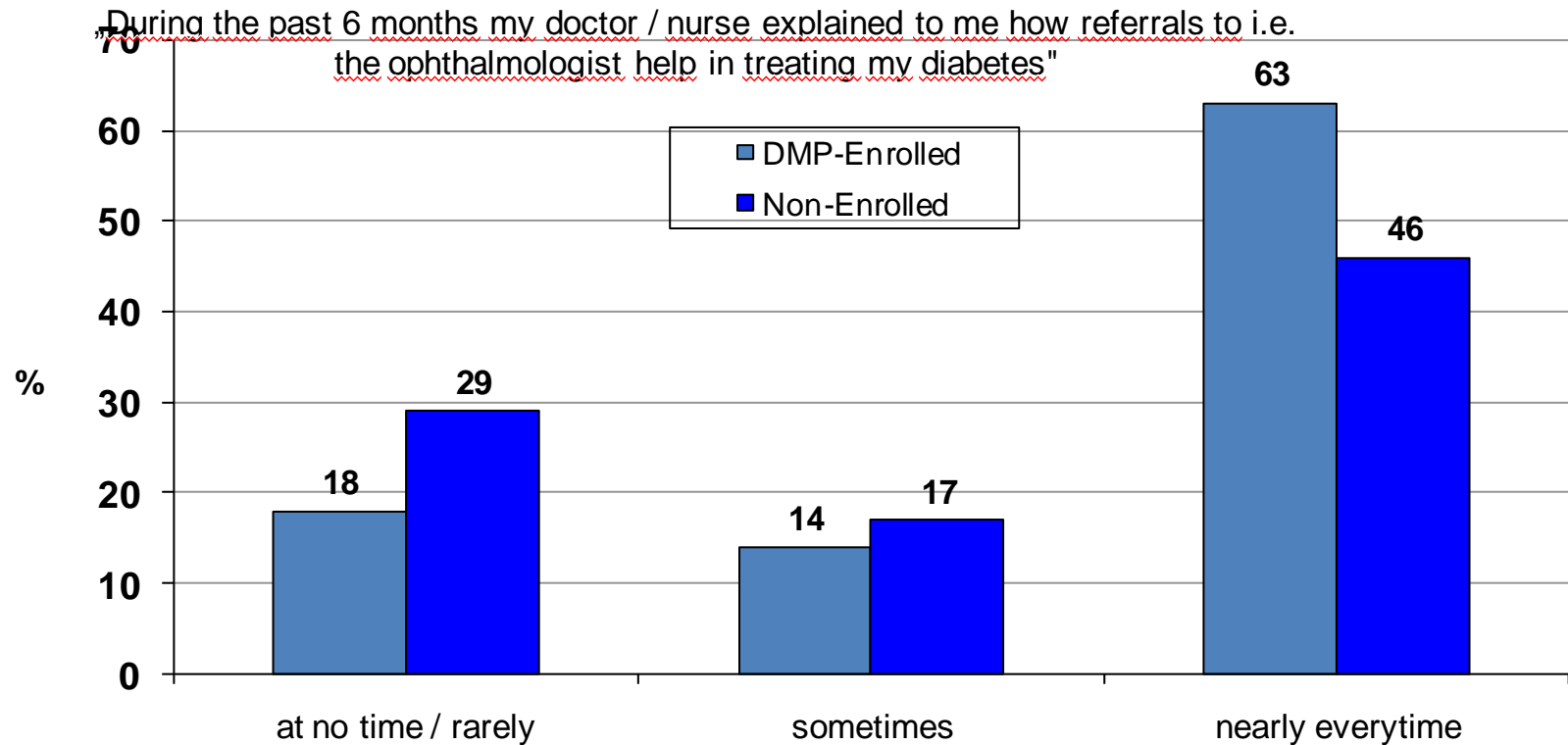
This graph includes patients with first time education. Number of patients may vary from bar to bar between n=10.614 (at t₊₁₅ until n=68.651 at t₀)

Results of German DMPs

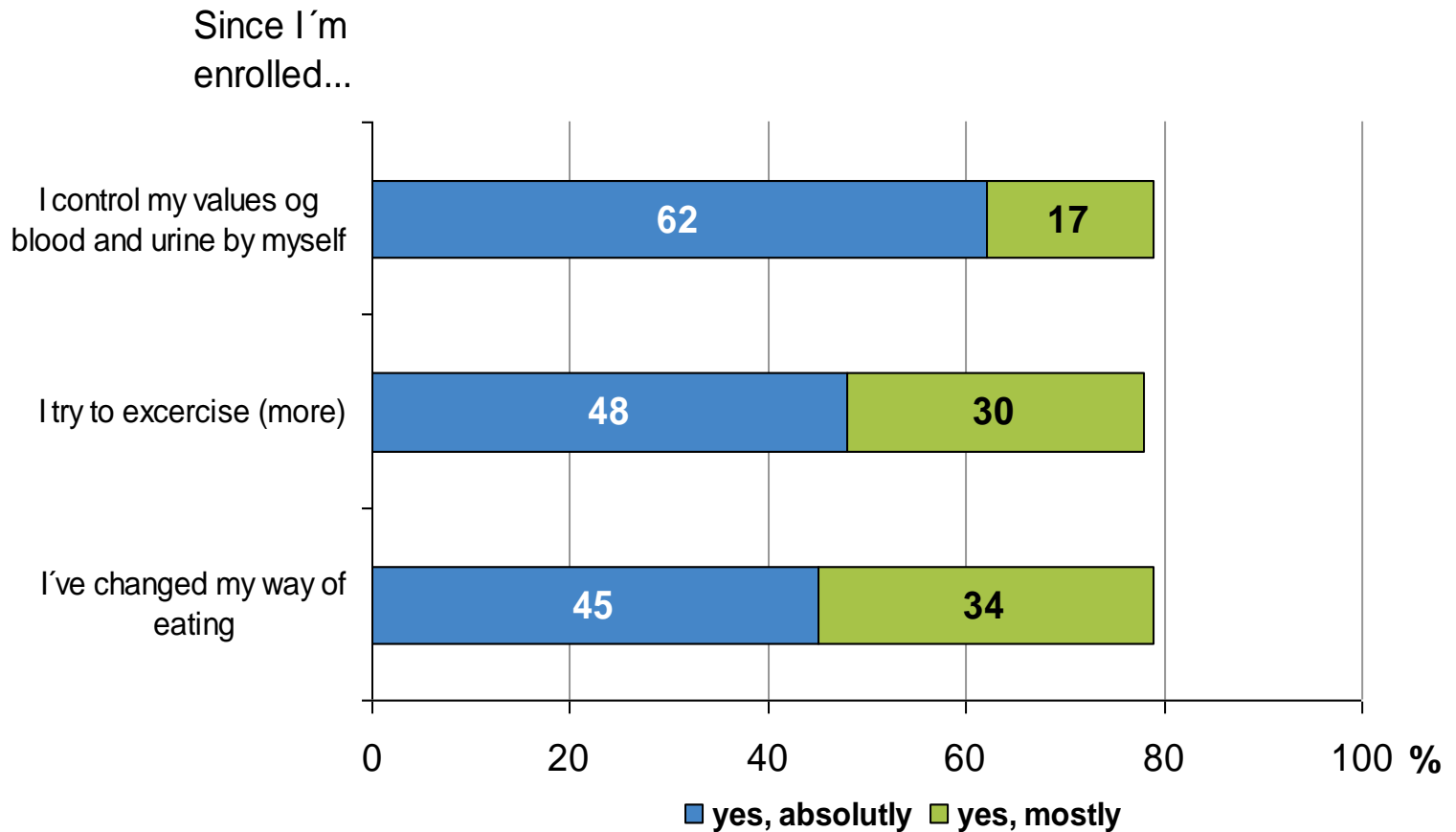
DMP Diabetes mellitus Type 2 North Rhine
changes in HbA_{1c} before and after specialist referral



Results of German DMPs



Results of German DMPs





Future & Conclusion of Disease Management in Germany

- Evaluation of programs will become one of the largest data bases in Europe
- Physician-based DM can improve chronic care outcomes
- A modular approach should be favoured over a disease-specific approach
- A much more stronger focus needs to be placed on patient education by integrating “traditional” patient education with motivational and behavioural change techniques and self-management support

Conclusions for Chronic Care in Europe...

- The challenge to manage chronic disease affects all EU countries. This implies...
 - ...that chronic care structures need to be harmonized on a EU-level
 - ...the EU must put a focus on establishing recommendations for patient self-management and empowerment in all new health policy initiatives
 - ... patient education must go beyond increasing knowledge and skills and include motivation, self-management support and behaviour change techniques



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**Thank you for your attention –
Je vous remercie de votre attention**

