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Institut für
Gesundheitsökonomie und
Klinische Epidemiologie



Pay-for-Performance in Disease Management Programs – a Perspective for Germany?

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The Problem

FACING THE FACTS



World Health
Organization

http://www.who.int/chp/chronic_disease_report/en/

THE IMPACT OF CHRONIC DISEASE IN GERMANY

Chronic diseases are the major cause of death and disability worldwide

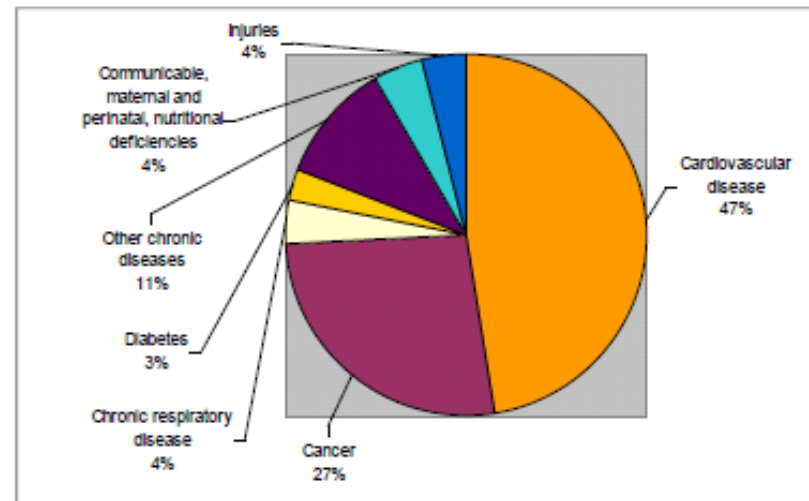
Facts:

- In Germany, chronic diseases accounted for 92% of all deaths in 2002 (see chart, right).
 - Total deaths in Germany, 2002 = 815,000.
 - Total deaths due to chronic disease in Germany, 2002 = 748,000.

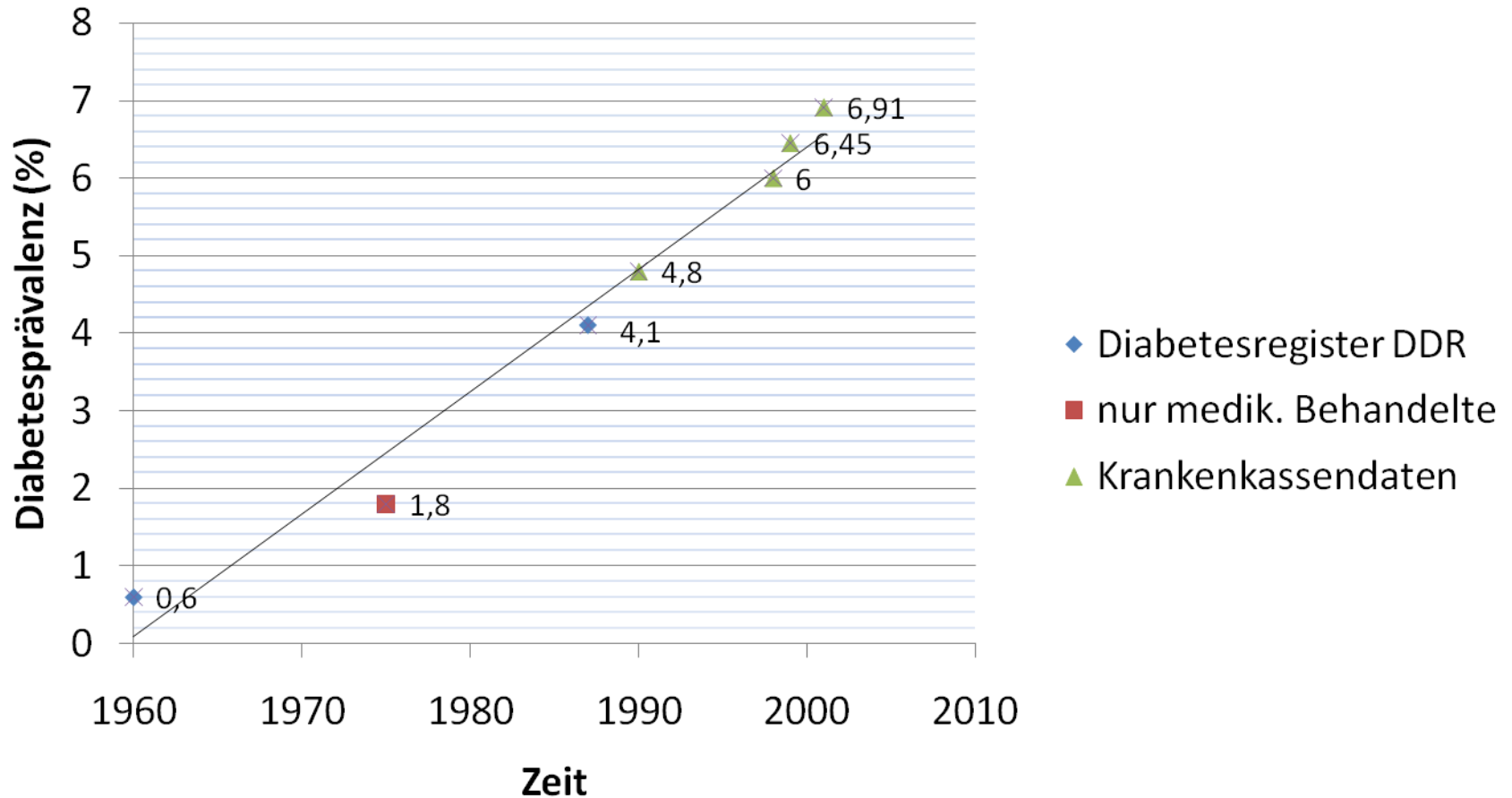
Note:

The data presented in this information sheet were estimated by WHO using standard methods to maximize cross-country comparability. They are not necessarily the official statistics of WHO Member States.

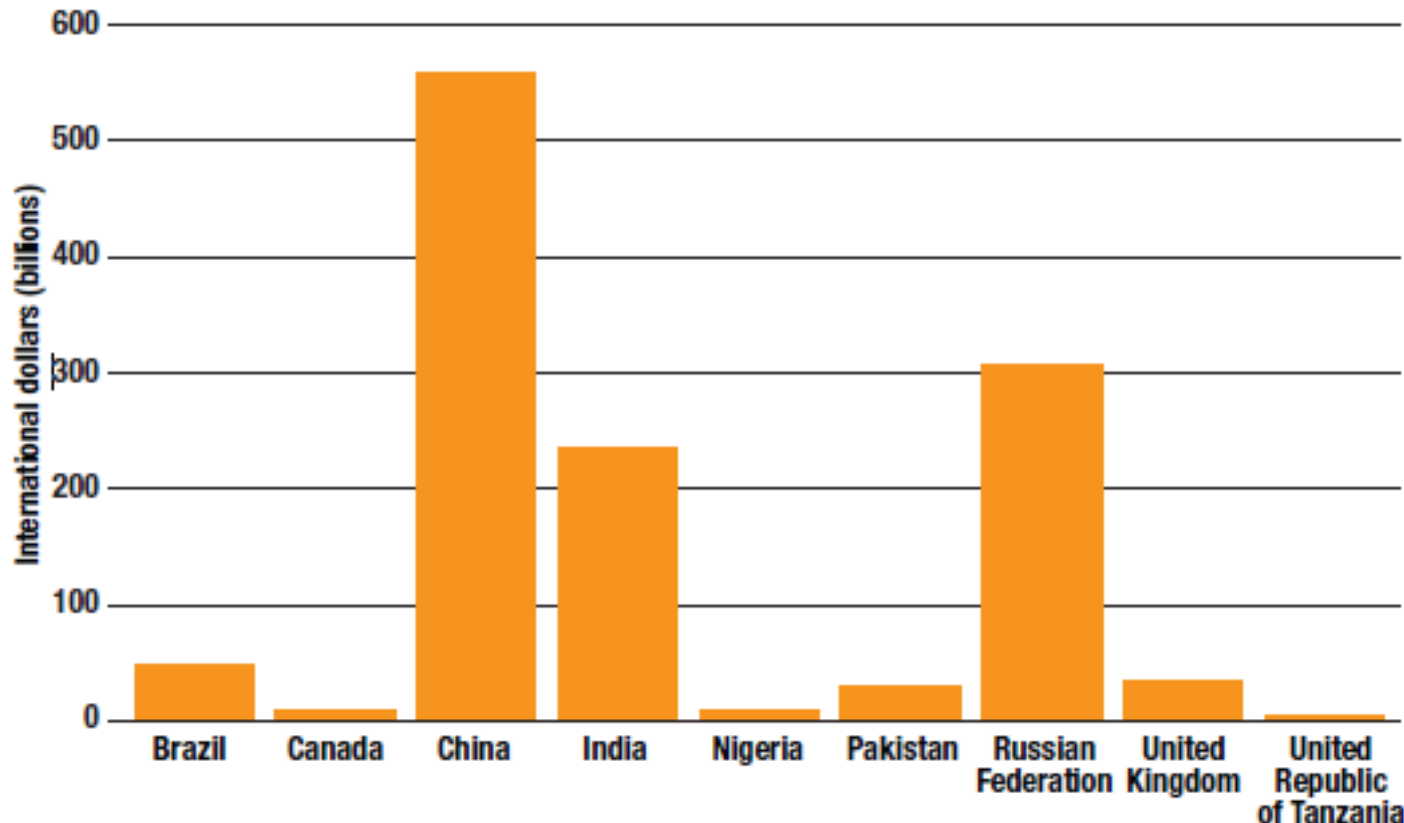
Deaths by cause, all ages, Germany, 2002



Prevalence of Diabetes Mellitus in Germany



Projected foregone national income due to heart disease, stroke & diabetes selected countries



Features in Dealing with Chronic Disease

„Patient Year“

About 8745 hours
of self dependent
therapy

Ca. 12 hours
of structured
education

Ca. 3 hours of
professional
care (outpatient care)



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.“



Coordination of care in Disease Management Programs in Germany

Patient

Primary Care Physicians

Health Insurance Companies
(health plans)

Shows diabetes inclusion criteria

Includes patient

No care managers needed

Pays management fee to physician

Gives information to service organisation, EMR

Gets reminder from EMR

Gets reminder from EMR

Provides service

Gets quality report



Requirements of the Bundesversicherungsamt

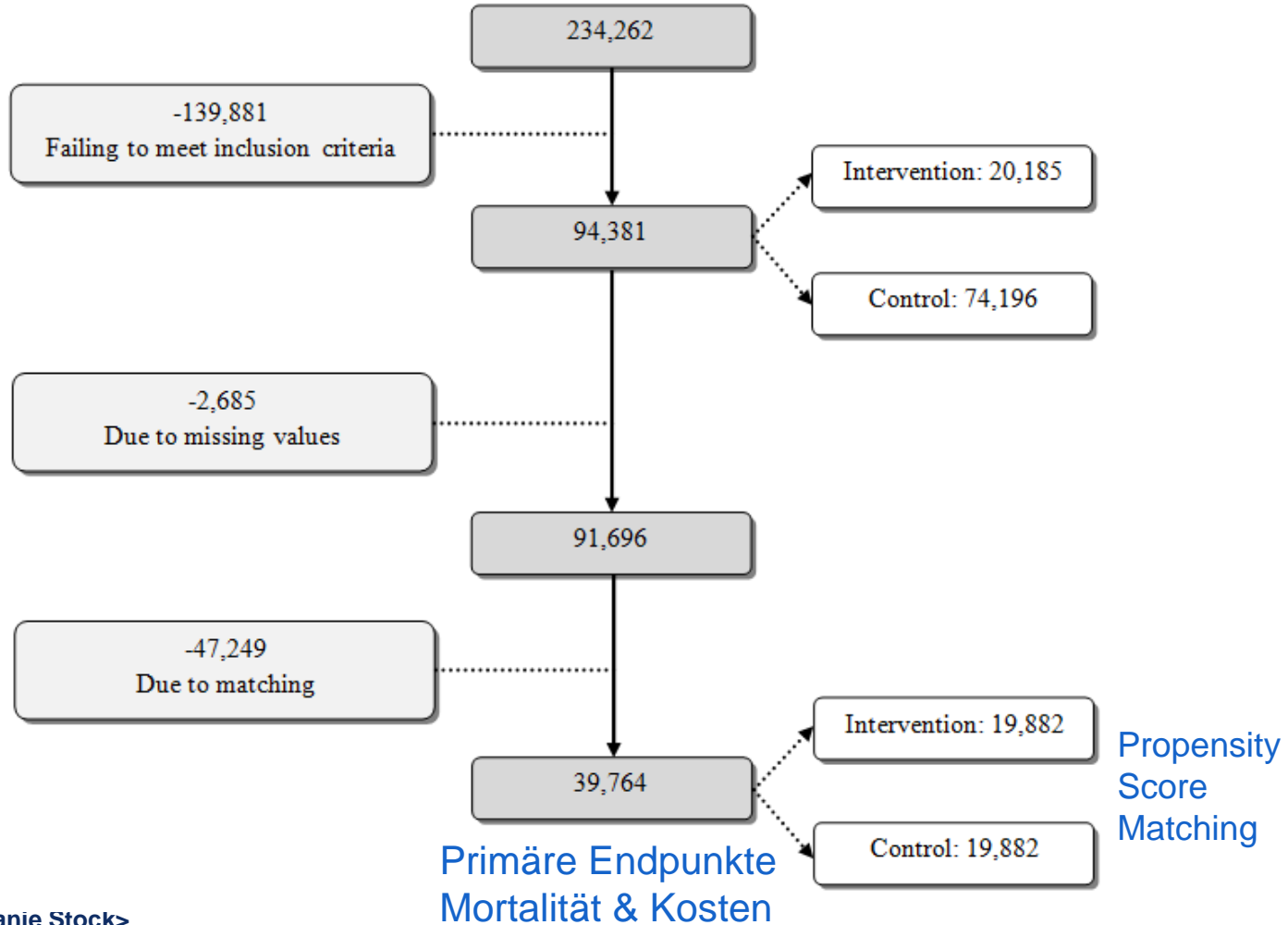
Enrolment	Written patient consent
Enrolment criteria	Physician diagnosis
Quality regulations	Quality is measured by process and outcome quality indicators (for instance HbA1C, blood pressure readings, yearly eye inspections, participation in patient education). With regard to diabetes better control of hypertension, more eye exams, regular foot exams, better cholesterol control, and improved patient understanding of the disease were important quality targets
Documentation	Enrolment criteria, lab readings, documentation of diagnostic and therapeutic interventions, participation in patient education
Incentives	Bonus for patients and participating physicians Sickness fund receives money from risk pool for enrolled patients
Scientific support	National committee of experts agreed on evidence based treatment goals

DMP – Evaluation

Methods I

DMP Group
Enrollment in DMP and
continuous enrollment
over study period

Control Group
No enrollment in DMP
Over study period



DMP – Evaluation

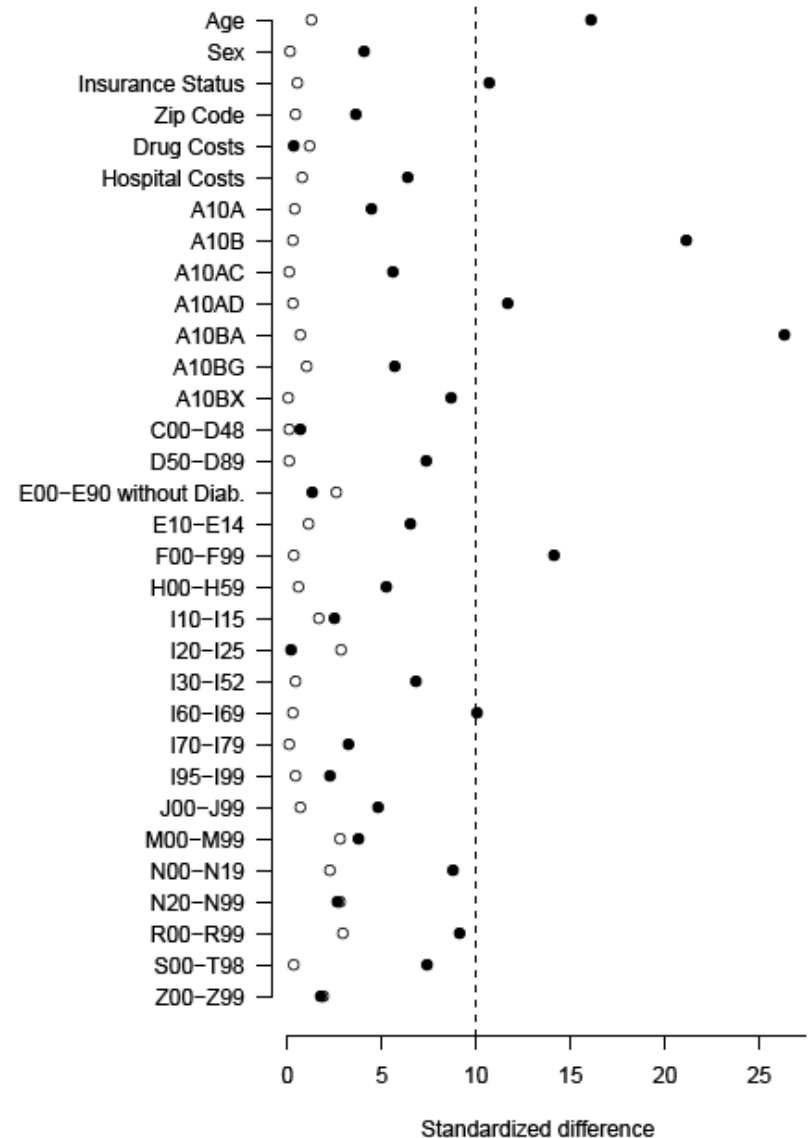
Methods II

	Co-variates for regression analysis
sociodemographic	Gender
	Age
	Insurance status
	Zip code (first 3 digits)
Disease severity	Drug costs 2003
	Hospital costs 2003
	ATC-Codes (Antidiabetika)
	19 ICD-Codes

DMP – Evaluation

Methods III

After Matching all
included variables
were balanced
(Standardized
difference < 10%)



DMP – Evaluation

Results

Outcome	Intervention group	Control group
Mortality ($p < 0,001$)	458 (2,30%)	935 (4,70%)
Difference of over all cost (2007 – 2003) ($p < 0,001$)	1.094,27 €	1.432.90 €
Overall cost 2007	3.997, 63 €	4.469,52 €
Drug cost 2007	1977,81 €	1.973,72 €
Hospital cost 2007	2.019,82 €	2.495,80 €
Average no of hospitalizations	0,5	0,62
Average duration of hospitalization	4,79 days	6,41 days

DMP: levels for links to P4P

Care levels for available evidence for improvement in care

➤ **Change of Behavior**

Succesfull change in physician / patient behavior
i.e. smoking cessation / prescribing

➤ **Change of Clinical / Physiologic Parameters**

Changes in blood pressure, HbA1c,
stroke or amputation rates

➤ **Change in healthcare utilization / cost**

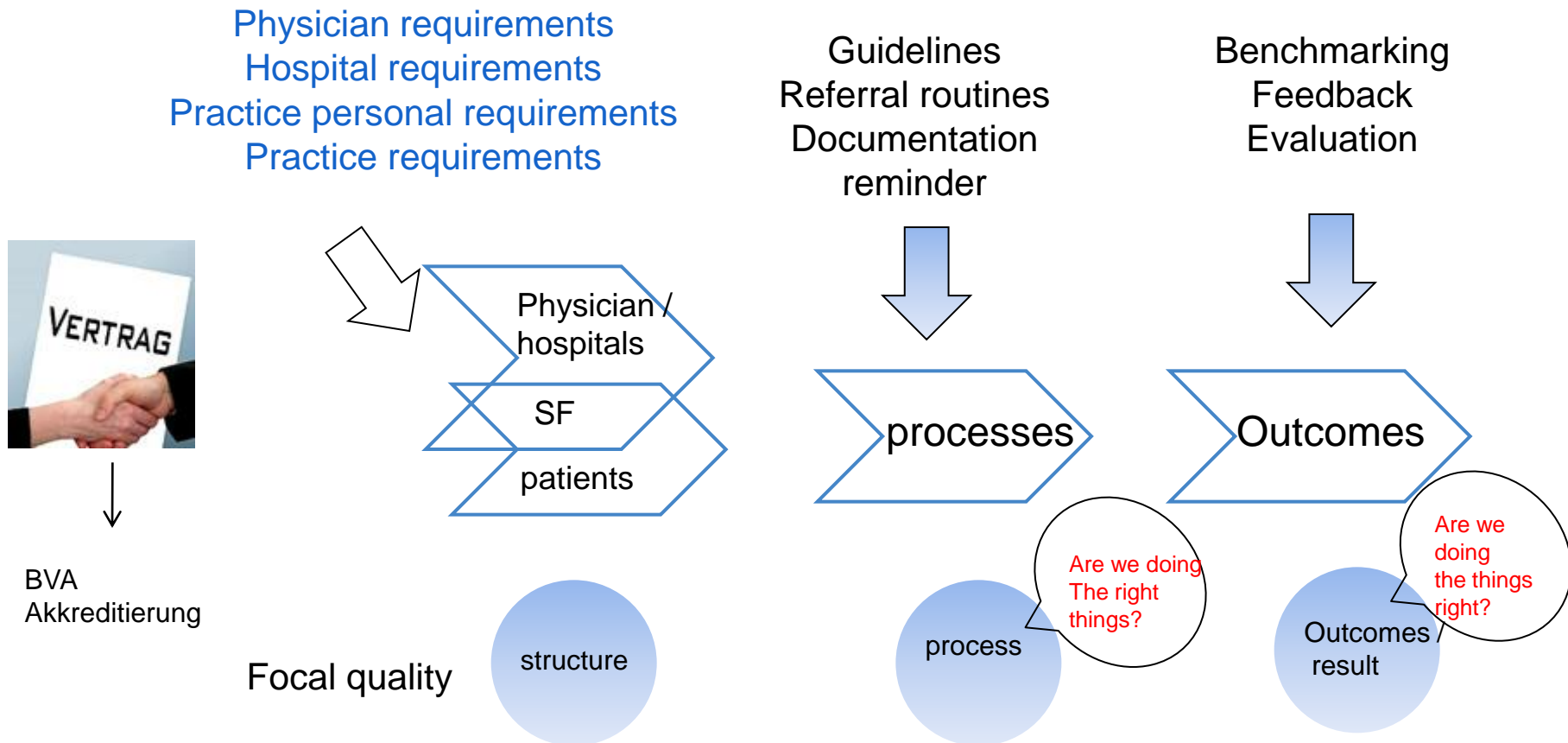
Decrease in hospitalization rates, length of stay



Management Components in German DMP (DMAA*)

Komponente	Deutsche DMPs
Population identification process	Enrollment criteria / DMP physician
Evidence based guidelines	National care guidelines
Collaborative practice models	Integration between sectors and within sectors (referral routines)
Patient self-management education	Patient education
Process & outcomes measurement	Routine documentation
Evaluation and management	Evaluation and management routines (i.e. referral routines)
Feedback loops	Benchmarking and feedback reports, reminder

Links to P4P in German DMPs





Features of P4P schemes, their dimensions and possible links to German DMPs

	Dimension	German DMP	In place	Possible
Type	Reward Penalty	Both possible	Documentation payment (Phy) Administration fee payment (SF)	Yes
Nature incented entity	Individual Group	Both possible	Documentation payment (Phy) RCS (SF)	yes
Focal quality behavior targeted by incentive	Structure Process Outcomes	All possible	Requirement w/o incentive Requirement w/o incentive Requirement w/o incentive	yes
Scope	General Selective	Both possible	Documentation (Phy)	yes



Features of P4P schemes, their dimensions and possible links to German DMPs

	Dimension	German DMP	In place	Possible
Motivation	Intrinsic Extrinsic	Both possible	Waiving of co-payments (PT)	yes
Scale	Relative Absolute	Not possible Possible	----- Documentation (Phy) Enrollment (SF)	Yes
Size	Amount of money	Small amount possible.	Documentation (Phy) Waiving of co-payments (PT)	Yes
Certainty	Certain Uncertain	Possible -----	Documentation (phy) -----	yes
Frequency & Duration	No of times No of years	Possible ?????	Documentaion (Phy) RCS & administration payment (SF)	yes



P4P in German DMPs- Pro and Contra

- Could target what has not been addressed so far:
- Delivery system re-designing
- Patient self management support/ SDM
- Suitable diseases for P4P
- All dimensions of P4P can be addressed
- P4P could be implemented on a national level which yields more uniform results
- Not all diseases are suited for P4P
- High quality improvement already achieved which leaves little room for improvement (ceiling effects)
- No additional money available – where should the money come from?



P4P in German DMPs – Policy issues

- Does P4P also affect cost / efficiency of care or only quality?
- Size of incentive? Reward or penalty?
- National roll out or pilot project?
- What happens when the targets are met?
- Are there unintended consequences?
- Should P4P involve quality of service and patient satisfaction?
- Should results be made transparent?



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Thank you for your attention!

