

Bart de Witte

09.11.2010 – ITAPA – Bratislava - Slovakia



Let's Build A Smarter Planet:

The importance of Program Management and Change Management in eHealth

Bart de Witte
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IBM CEE



Picture Source : NASA Denmark

Why Change Healthcare? .

Industry challenges from a global perspective

staff shortage

Nursing and specialist shortages demand workforce productivity and efficiency

chronic diseases

Incidence and cost of chronic and re-emerging infectious diseases are increasing

globalization

Health care is shifting from local to national and global contexts

cost

Growing costs for new, revolutionary technologies and treatments

demographics

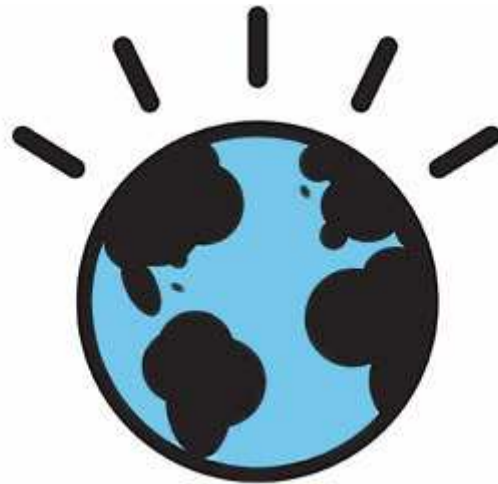
Changing demographics and lifestyles drive associated costs

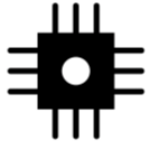
consumerism

Empowered consumers expect better value, quality, and outcomes

This mandate for change is a mandate for smart.

A smarter health system
forges collaborative partnerships
to deliver better acute, chronic and preventive care,
while activating individuals to make smarter choices.





Our world is becoming
INSTRUMENTED

Our world is becoming
INTERCONNECTED

All things becoming
INTELLIGENT

An opportunity for health systems
to think and act in new ways.

Smart healthcare:

Intelligent : Creating new knowledge, healthcare services and care models.

SMART IS

Improving quality of care by the use of decision support analytics in medical business intelligence. Using powerful algorithms to pinpoint potential problem and flag images based on the probability of abnormality.

[VIDEO](#)

SMART IS

Consolidating information to provide a comprehensive patient view including complete medical history



Mayo Clinic: Worked with IBM to deploy an advanced image processing capability and created new analytic algorithms, integrating them seamlessly into its radiology workflow. The automated system gives radiologists a powerful new diagnostic tool and source of insight that helps them improve patient care through better, earlier detection. A 50 time reduction in motion correction processing enables radiologists to provide results in minutes, not hours



Geisinger: Integrates real-time clinical, financial, operational, claims, genomic and other medical information in a massive clinical decision intelligence system, assisting doctors to provide best practice care and supporting innovative medical research and treatments.

Smart healthcare: Achieve better quality and outcomes.

SMART IS

Changing primary care

[Offline demo](#)

[Online demo](#)



Danish Quality Unit of General Practice : has developed an IT programme with IBM – called Sentinel Data Capture – that automatically collects patient data from the GP's electronic health record system. The purpose is to collect data for quality development and research - and prevention

SMART IS

Driving improvements in patient care
by opening up access to shared data



to

Storstrøms ErhvervsCenter: Created a predictive health monitoring system that uses advanced telemetry technology to monitor elderly patients and share data with healthcare providers in real time, increasing efficiency and success in chronic illness management.

E-Health – an enabler and catalyst for change



E-Health Program

- Most E-Health implementations involve:
 - A program of many (10 to 50 or more) related projects
 - The projects tend to be:
 - Interrelated
 - Complex
 - Multi-stakeholder
 - Procured from multiple suppliers
 - Delivered in many different ways
 - Affecting the same client population

eHealth Adoption Barriers – Fear of Change

Clinical Staff may

- Experience a loss of Personal Control
- Have anxiety around Benchmarking (KPIs) and transparency that EHR create, on their clinical practice.
- Fail to see value in eHealth solutions
- Loose of Revenue due to higher documentation effort and new guidelines
- eHealth Integration Costs
- Lack confidence in new systems or ability to learn new skills



BARRIERS for eHealth Adoption

Patients may

- Lack confidence in eHealth tools
- Have concerns about reassigned to physicians and not have access to physicians known to them
- Not trust e-services which replace face to face encounters with administrative and clinical staff (ebooking for example)
- Concerns about inappropriate information protection and sharing

Ingredients for success in eHealth

- Learn from the past and other countries – best practices
- Design a rock solid PMO Governance process
 - Direction
 - Project oversight
 - Stakeholder buy-in
- Use Standards and methods across the program
 - Project management
 - Common project phases & gates
 - Alignment with an E-Health Architecture using a Design Authority
 - Change management
 - Value management
- Coordination through an overall Program Management Office (PMO)
 - “A "Project Office" is a centralized group consisting of one or more individuals within an organization established to perform project management functions for a single project or for a portfolio of projects that make the organization and its projects more effective.”

Relevance for eHealth Strategy

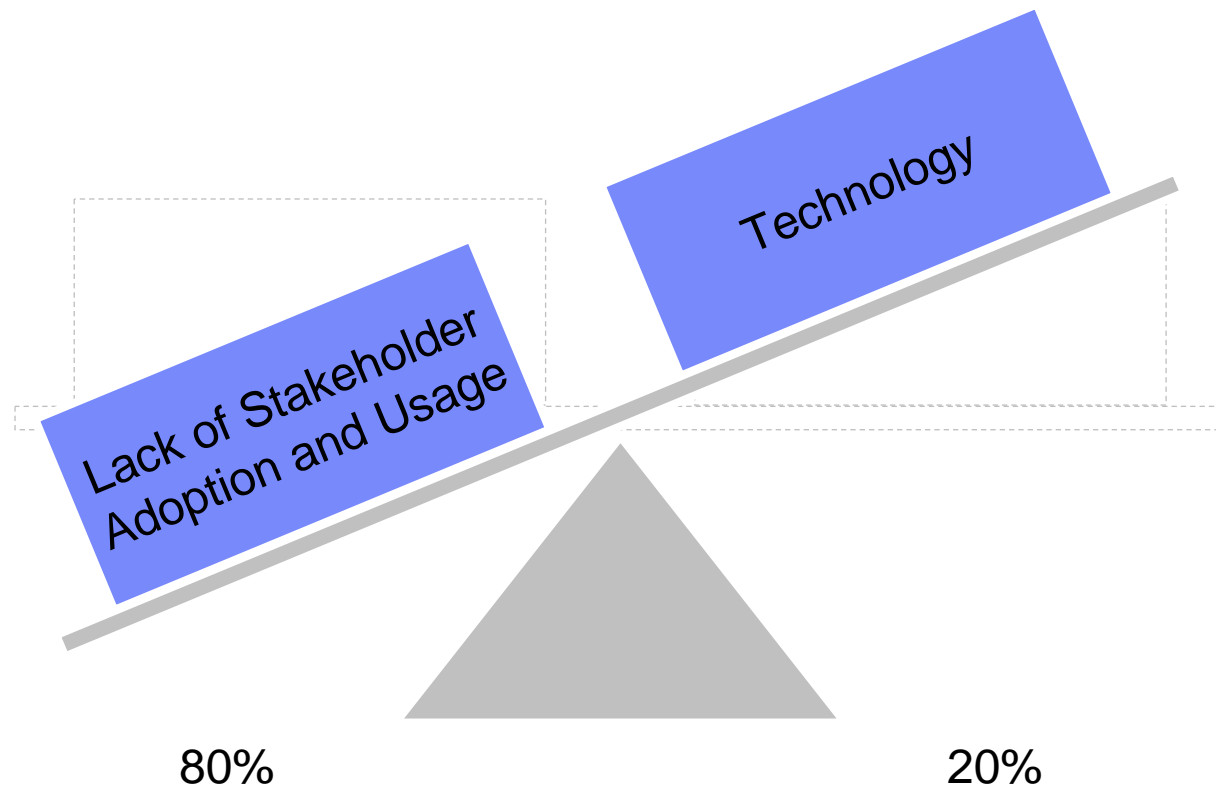
- A PMO is necessary for E-Health success but may not be sufficient
- Traditional PMO structures focus on project management issues and processes
- E-Health requires more than project management and a PMO can support other important processes like:
 - Methods
 - Standards
 - Architecture
 - Governance
 - **Change Management**
 - Benefits Realization

Change Management in eHealth Get an answer on what's in it for me?



"WHEN THE NEW MANAGEMENT PROMISED US CHANGE, I THOUGHT THEY WERE REFERRING TO MONEY."

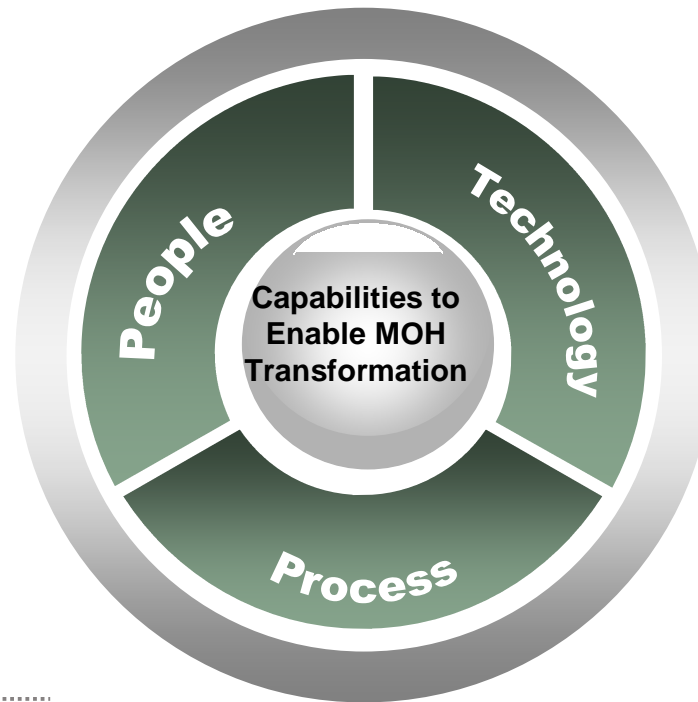
Ministry of Health – eHealth Risks



People & Process & Technology

People

- Patients must
 - have confidence in MOH
 - Provided with value based, equitable, convenient services
 - Given opportunity for feedback
- MOH Staff will
 - Shift Culture to Value, Performance, Knowledge and Standards Based Culture
 - Develop new skills and capabilities
 - Be focused on Quality and Productivity
- New eHealth Governance Model
 - Represent all MOH divisions needed for eHealth to be successful
 - Clear accountabilities
 - Roles and responsibilities
 - Skills and capabilities required



Technology

- eHealth Services
 - iEHR and Clinical Automation
 - Clinician Quality & Productivity, Decision Support, Evidence Based Guidelines
- Performance Management and Health Analytics
- IT Standards and Principles
- eHealth Enterprise Architecture
- eHealth Infrastructure
 - Data Centres
 - Facility Infrastructure as required
 - Kingdom Wide Network Infrastructure

Process

- Standardized Business Processes, with common policies and standards imbedded in processes and workflows
- Seamlessly move patient to appropriate level of care and facility
- Capability to measure and identify opportunities for improvement
 - View of patient care activity across enterprise
 - View of facility quality and productivity across enterprise

Change Management Strategy Development Framework

Macro Focus on Strategic Execution



Micro Focus on People Change

IBM Better Change Method

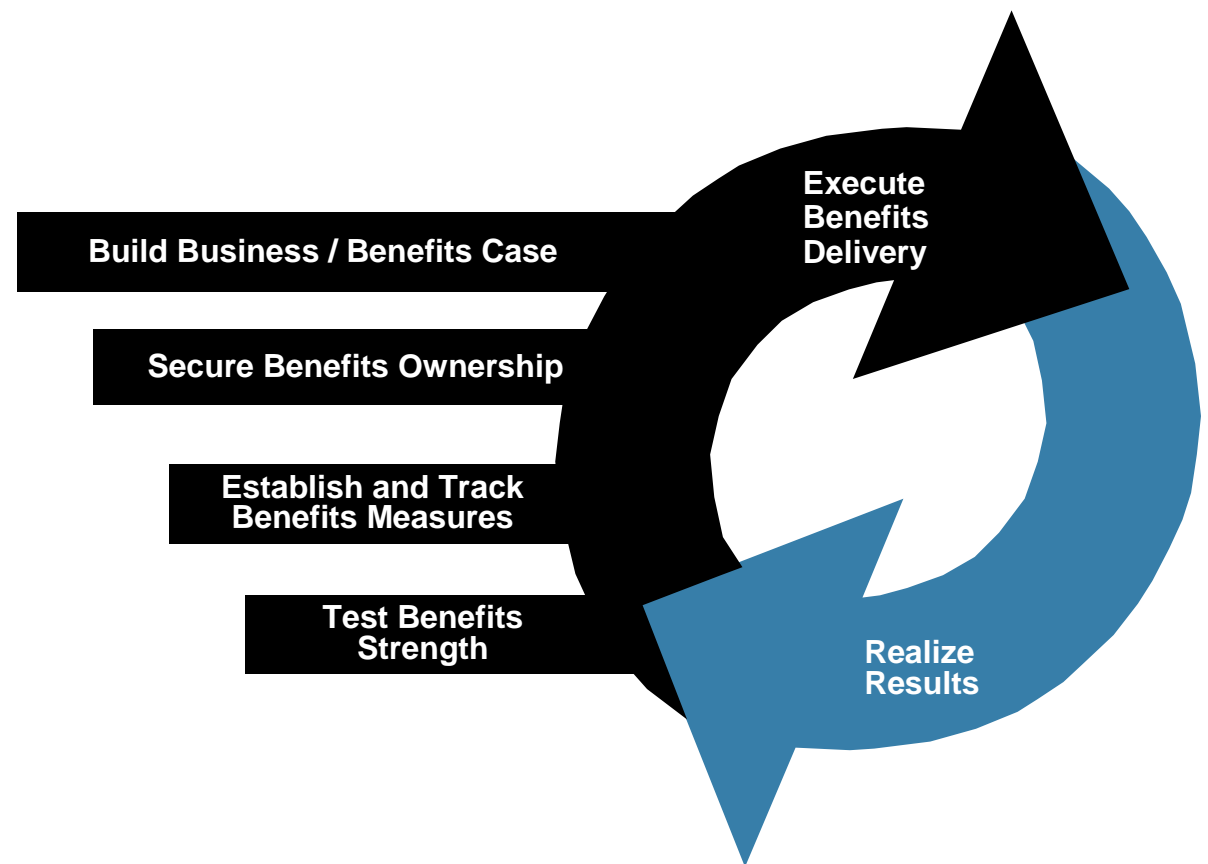
Enablers	Strategic			Tactical	
Value Realization	<ul style="list-style-type: none"> • Roadmap to benefits • Business case development 	<ul style="list-style-type: none"> • Baseline assessment • Benefit target setting • Benefit governance & ownership • Mnge delivery&leverage success 	<ul style="list-style-type: none"> • Benefits scorecard & reporting • Benefit action planning • Benefit tracking 		Focus on results
Program Strategy and Management	<ul style="list-style-type: none"> • Strategic analysis and planning 	<ul style="list-style-type: none"> • Project portfolio analysis • Change impact analysis • Change readiness assessment 	<ul style="list-style-type: none"> • Project team health ch 		Focus on strategic execution
Program Leadership and Governance	<ul style="list-style-type: none"> • Case for change • Change vision and sponsorship 	<ul style="list-style-type: none"> • Program governance & decision-making 	<ul style="list-style-type: none"> • Change champion net 		Focus on strategic execution
Organization Design	<ul style="list-style-type: none"> • Business model innova • Enterprise/function des • Organizational governa 	<ul style="list-style-type: none"> • Organization and workgroup design • Organizational alignment • HR policy and process alignment 	<ul style="list-style-type: none"> • Job impact analysis • Transition managem 		Focus on people change
Stakeholder Engagement and Communications	<ul style="list-style-type: none"> • Stakeholder managen strategy • Communications stra 	<ul style="list-style-type: none"> • Stakeholder planning • Communication planning 	<ul style="list-style-type: none"> • Stakeholder mobilizati • Communications deliv 		Focus on people change
Skills and Knowledge	<ul style="list-style-type: none"> • Skills & knowledge stra • Skills & capability assessment 	<ul style="list-style-type: none"> • Knowledge management & transfer 	<ul style="list-style-type: none"> • End user training 		Focus on people change
Culture Transformation	<ul style="list-style-type: none"> • Culture transformatio strategy 	<ul style="list-style-type: none"> • Culture assessment • Culture intervention design • Culture transition plan 	<ul style="list-style-type: none"> • Culture transition management & measurement 		Focus on people change

Benefits Realization Approach

Realizing cost benefits and sustaining them over time requires the incorporation of a benefits realization and tracking mechanism to understand change, measure it and communicate its impact throughout the organization.

Key Activities include:

- Identify benefits
- Create benefits case
- Define benefits owners
- Build action plans
- Create metrics
- Build a tracking mechanism
- Measure and monitor



Governance and stakeholder management

- In E-Health programs, a governance process will be defined in order to:
 - Provide direction to the E-Health program
 - Allocate resources
 - Management the project portfolio
 - Make key decisions (e.g., start, stop, continue etc.)
 - **Resolve issues**
 - **Remove obstacles**

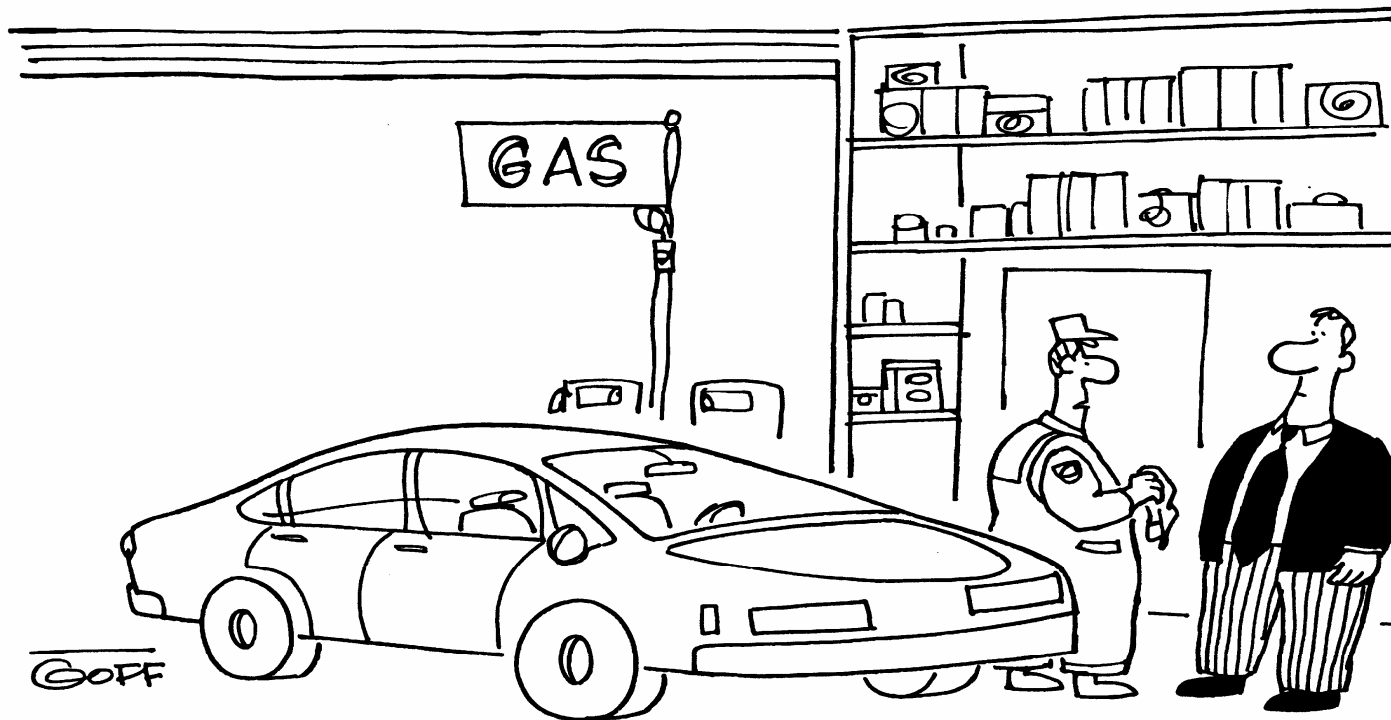
- Effective governance requires “secretariat” support
 - Coordination
 - Communication
 - Tracking and follow-up

Key issues:

- Buy-in
- Sponsorship
- Clear, consistent direction

Governance structures and processes must be uniquely defined for each environment

© 1997 Ted Goff



“We’ve looked under the hood, but we’ll need to have a few committee meetings before we can decide what to do.”

Change Impact Heat Map - Providers

Standards: Clinical Information, eHealth Program & Project
Policies: PHI, Access, Sharing, Retention, Privacy, Security etc

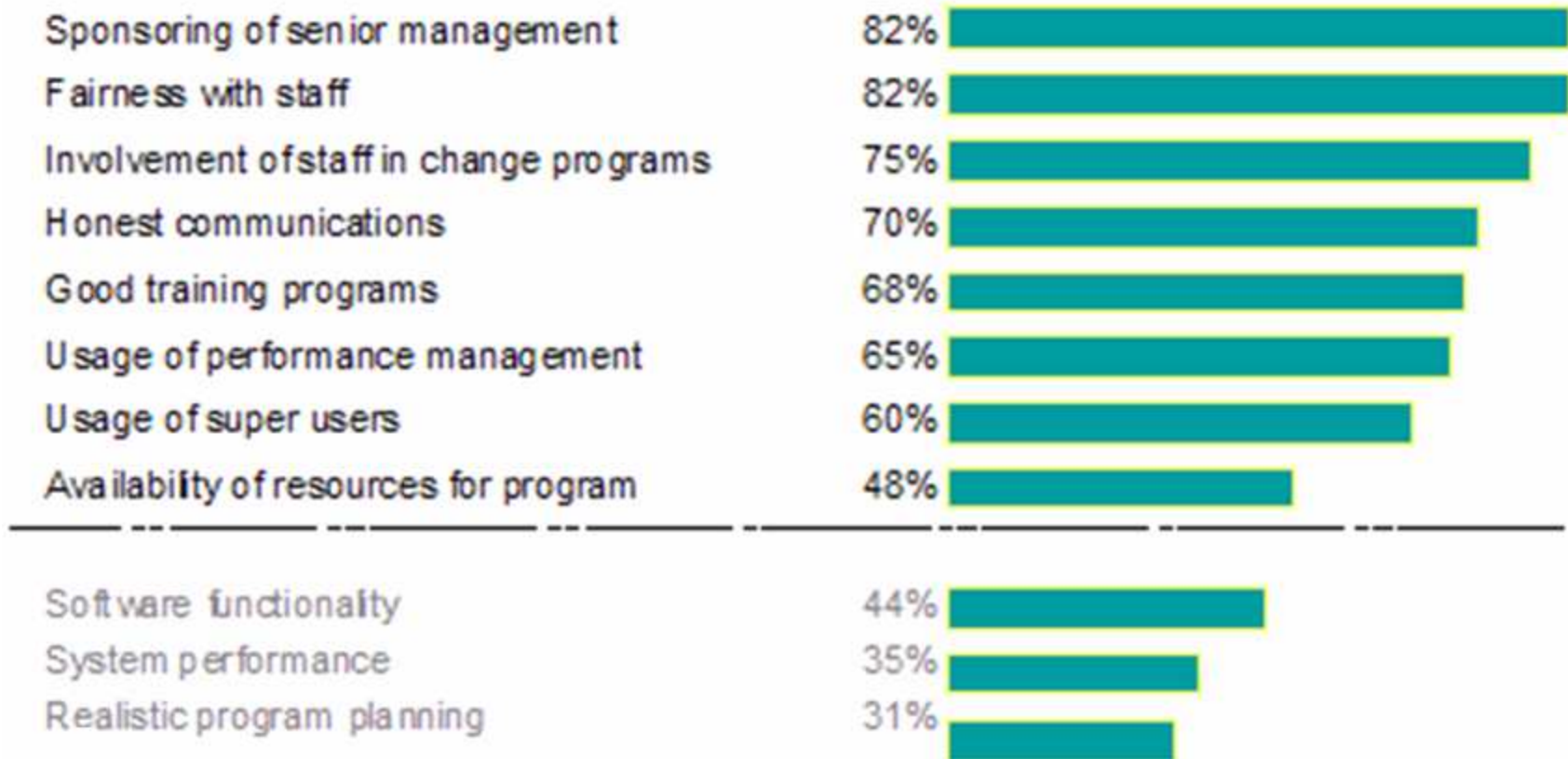
Processes: Care Planning & Delivery
Information: Patient, Orders, Results,
Technology: Point of Service solutions

Responsibilities: Existing plus “e”
Skills: Basic IT, Tele, e-Collaboration etc
Performance: Quality & Safety KPIs

	Provider Segmentation	Change Impact	Engagement Strategy	Level of Influence	Skills & Knowledge	Desired Behaviors & Outcomes	
25000+	Current Provider Workforce	Providers adept in Clinical Automation tools and workflows	High	<ul style="list-style-type: none"> Engage early for buy in & to assess eHealth support & capabilities Engage on what eHealth enables and “value” to patients and provider Engage on a per project basis on clinical level, not technology level Lever public’s support to combat resistance to KPIs & inspire adoption Engage with peer-to-peer networks to inspire adoption & reduce fear of KPIS Engage Just-in-time for skills & training & prior to new release launch Provide support to absorb change (i.e. reduce workload) Recruit new staff with eHealth skills Open new facilities with automation, advance train, test skills develop(reward Target content based on experience 	1	<ul style="list-style-type: none"> Link skills and knowledge development to over-arching change vision, i.e. “working in new ways” Build specific provider training modules (e.g. solution end-user training, basic IT training, workflow automation training, e-communications training, etc.) Establish level of provider proficiency required for each activity/training module based on individual role Thoroughly assess skills, knowledge and competencies required by each provider and propose appropriate individualized module mixes Provide adequate time for training (i.e. reduce workload) 	<ul style="list-style-type: none"> Accepting of Performance Culture High level of confidence in e-enablers eHealth advocate Adherence to MOH standards, compliance with policies Optimized workflows & increased clinical collaboration Equitable care for all patients Equivalent standards of care practiced by all providers Increased system capacity (e.g. through more efficient workflows, reduced redundancy) A learning culture MOH is desirable place to work
		Providers with some Clinical Automation experience	High		2		
		Providers with no Clinical Automation experience	High		3		
Staff for 1600+ new, 60 new hospitals	New Providers	Providers with deep eHealth experience and e-skills	Low		1		
		Providers with some eHealth Skills	Med		2		
		Providers with no eHealth Skills	High		3		

Change Management is key driver of Successful eHealth implementations

The key success factors for transformation are organisational rather than technical



Source : IBM Institute of Business Value

Summary

- E-Health programs are among the most complex business initiatives
- A well structured PMO can add tremendous value
- The optimal approach for an E-Health PMO addresses the bigger picture
 - Change Management
 - Benefit Realization
 - Governance
 - Architecture
 - Methods
- Attention to the broader picture improves chances of success

We need to connect the Islands – but we can only do this together if we have a clear view of the benefits and do this smart!



Picture Source : Bart de Witte – Big Belt Bridge - Denmark

Thank you for your attention

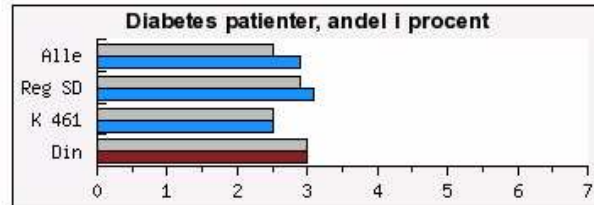


IBM Industry Solution Center

Global Healthcare Center of Excellence

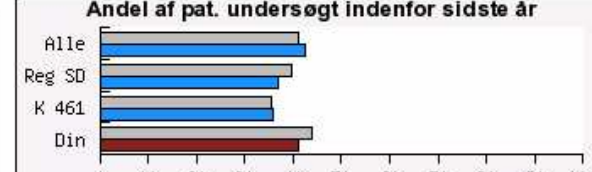
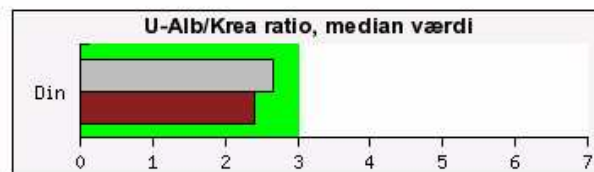
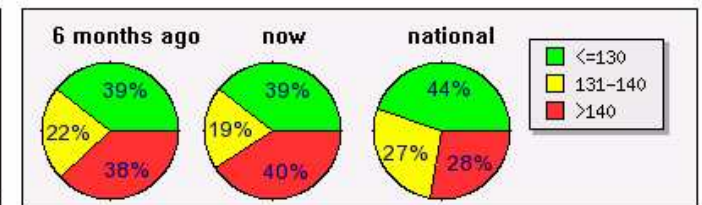
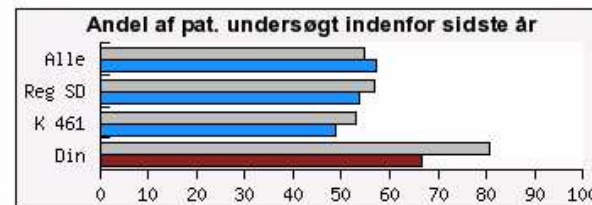
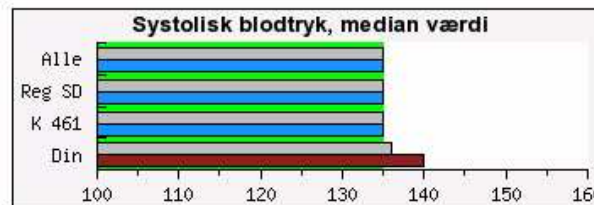
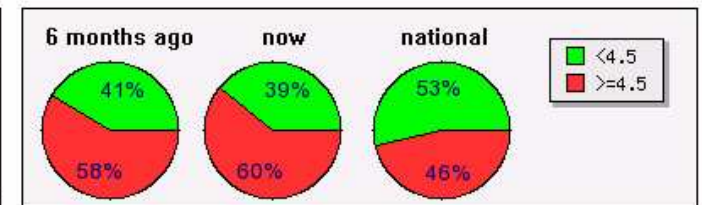
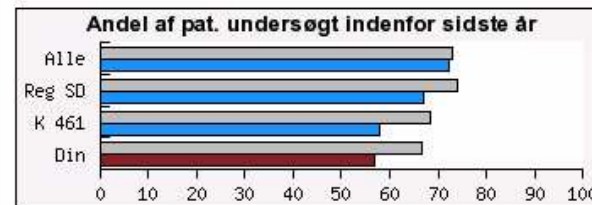
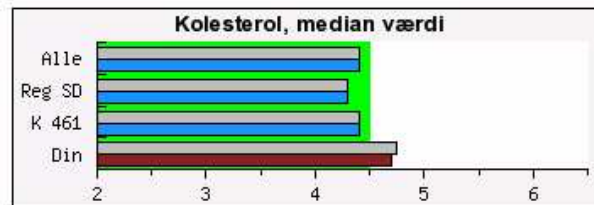
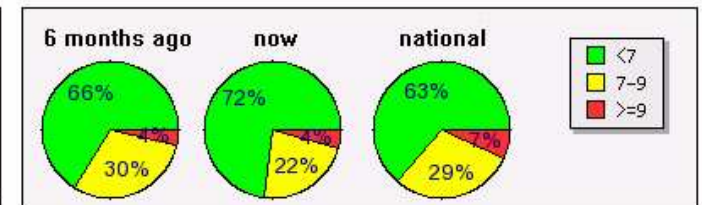
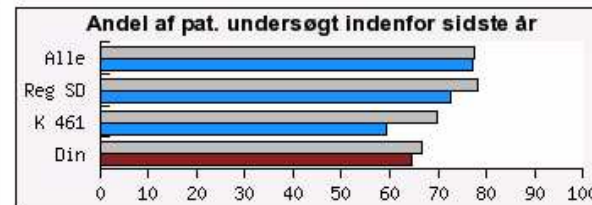
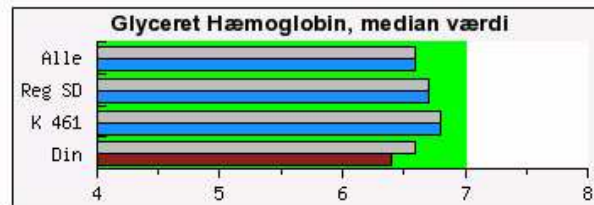
Your Diabetes treatment in comparison with other practices

The gray bars show the value for 6 month ago.



All = All patients treated by a GP who uses Data capture
 Reg SD = Region South
 K 461 = Municipality of Odense
 Din = Your population

The gray bars show the values a year ago.



Sentinel Datafangst

Patients with Diabetes M

Benchmark page 1

Benchmark page 2

Patients with Diabetes Mellitus. (Constructed/anonymous name list)

[How to read data](#)

[Improve quality](#)

[Print this page](#)

51 patients out of 1719 patients (3.0 %)

Data extracted: Thursday 25 February 2010 10:54:24

First Name	Personal id	Age	HbA1c	Treat-ment given as	S-Chol	U-Alb	Lipid lower ¹	ACE/ Ang II inhib ¹	BP	Drugs for BP	BMI	Smok-ing	Last GP	Re-spons-ability	Birth month	Last annual control
Allan	190235-xxxx	75			6.2					0			bt		2	
Anders	070278-xxxx	32								0		no	mvw	GP	2	4 jan 2008
Bent	030221-xxxx	89	0.063		5.5 ↓	14.5			125/65	0	20		wrbaa	GP	2	
Bente	150268-xxxx	42	0.070		4.7			yes	148/89	2			bt	GP	2	
Birgit	150846-xxxx	63	0.082	p	2.9	1.9	yes	yes	130/90	2	30	no	bt	GP	8	14 dec 2009
Birthe	230557-xxxx	52			4.1 ↓		yes			0	15		is		5	
Biarne	050942-xxxx	67	0.078	p	4.7	3.1	yes	yes	150/80	1	35		bt	GP	9	
Brian	201166-xxxx	43			5.4				105/75	0			bt		11	
Camilla	231175-xxxx	34	0.068 ↓		3.3 ↓	*			130/80	0	30		bt	hosp	11	
Carsten	060840-xxxx	69		i			yes	yes	130/80	2			bt	hosp	8	
Charlotte	170730-xxxx	79	0.058		4.1 ↑		yes		105/60	1			bt	GP	7	
Christian	231035-xxxx	74	0.067	i	2.8		yes	yes	133/73hj	3			bt	hosp	10	
Claus	140533-xxxx	76	0.065 ↓		4.9 ↓	*			150/85	0	32	yes	bt	GP	5	13 mar 2009
Erik	130435-xxxx	74	0.070	p	3.0	*	yes	yes	145/70	1	36	yes	bt	GP	4	17 jun 2009
Finn	090459-xxxx	50	0.048 ↑		4.1 ↓	*		yes	120/85	1	37	no	bt	GP	4	17 apr 2009
Flemming	090640-xxxx	69	0.050	p,i	4.2	3.7		yes	150/95	1	18		bt	GP	6	
Gitte	070154-xxxx	56	0.056 ↓		4.0	*	yes	yes	125/70	1	27	no	bt	GP	1	29 apr 2009
Hanne	230760-xxxx	49	0.061 ↑		4.4 ↑			yes	152/108	1		no	bt	GP	7	12 jun 2008
Helle	070856-xxxx	53	0.074	i	6.0 ↑	*	yes		170/90	1	33	yes	bt	GP	8	14 aug 2009
Henning	290444-xxxx	65	0.064 ↓	p	5.0		yes		130/80	0			bt	hosp	4	
Henrik	261128-xxxx	81	0.089	i	4.7 ↓	*		yes	130/75	2	30		bt	GP	11	6 nov 2008
Inge	280139-xxxx	71	0.076 ↑	p	3.5 ↓	*	yes	yes	150/90	2	33	no	bt	GP	1	15 feb 2010
Jan	240155-xxxx	55	0.065		5.5 ↑	*	yes	yes	129/81	1	27	yes	bt	GP	1	27 jan 2010
Jens	110143-xxxx	67	0.072	p	4.5	*		yes	135/85	3	26	no	bt	GP	1	16 feb 2010
Jesper	020938-xxxx	71	0.057 ↑		5.6 ↓			yes	120/70	3	27		bt	GP	9	

¹ Has received a prescription within the last 2 years. A star * indicates that measurement is made, but the result is not usable.

An arrow shows that there has been a change in the measured value since the previous control, green arrow indicates improvement while red arrow indicates worsening. All personal names in this demo are constructed

Sentinel Datafangst

Patients with Diabetes M

Benchmark page 1

Benchmark page 2

Patients with Diabetes Mellitus. (Constructed/anonymous name list)

[How to read data](#)

[Improve quality](#)

[Print this page](#)

51 patients out of 1719 patients (3.0 %)

Data extracted: Thursday 25 February 2010 10:54:05

First Name	Personal id	Age	HbA1c	Treat-ment given as	S-Chol	U-Alb	Lipid lower [†]	ACE/ Ang II inhib [†]	BP	Drugs for BP	BMI	Smok-ing	Last GP	Re-spons-ability	Birth month	Last annual control
Morten	120728-xxxx	81	0.102	p	7.0				140/80	2	30		bt	GP	7	
Thomas	180624-xxxx	85	0.077	p	6.6 ↑	2.4		yes	149/72	3	23	no	bt	GP	6	26 sep 2008
Jytte	280654-xxxx	55	0.107	p	6.6	*	yes	yes	145/82	1	28		bt	GP	6	
Torben	221139-xxxx	70	0.061 ↓	p	6.2 ↑	*	yes	yes	145/90	2	36	no	bt	GP	11	8 dec 2009
Susanne	020345-xxxx	64	0.058 ↓		6.2 ↑	2.9		yes	154/70	3	41	no	bt	GP	3	4 jun 2009
Allan	190235-xxxx	75			6.2					0			bt		2	
Martin	030532-xxxx	77	0.057		6.0 ↑	*			138/79	0	31	no	bt	GP	5	25 maj 2009
Helle	070856-xxxx	53	0.074	i	6.0 ↑	*	yes		170/90	1	33	yes	bt	GP	8	14 aug 2009
Mette	200420-xxxx	89	0.060 ↓	p	5.7	10.4		yes	140/85	1	24	no	bt	GP	4	15 apr 2009
Pia	121025-xxxx	84	0.062	p	5.6	1.4	yes	yes	155/70	2	36	no	bt	GP	10	1 maj 2009
Jesper	020938-xxxx	71	0.057 ↑		5.6 ↓			yes	120/70	3	27		bt	GP	9	
Bent	030221-xxxx	89	0.063		5.5 ↓	14.5			125/65	0	20		wrbaa	GP	2	
Jan	240155-xxxx	55	0.065		5.5 ↑	*	yes	yes	129/81	1	27	yes	bt	GP	1	27 jan 2010
Ole	020942-xxxx	67	0.063 ↓	p	5.4	*		yes	120/60	1	22		bt	GP	9	16 sep 2009
Brian	201166-xxxx	43			5.4				105/75	0			bt		11	
Rasmus	230933-xxxx	76	0.067	p	5.4		yes	yes	135/85	3		no	bt	GP	9	20 okt 2009
Peter	230331-xxxx	78	0.063 ↑		5.3 ↑			yes	120/80	3	87		bt	GP	3	
Lars	200131-xxxx	79	0.079	i	5.0	8.1	yes	yes	110/60	2	19	yes	bt	GP	1	15 jan 2010
Henning	290444-xxxx	65	0.064 ↓	p	5.0		yes		130/80	0			bt	hosp	4	
Claus	140533-xxxx	76	0.065 ↓		4.9 ↓	*			150/85	0	32	yes	bt	GP	5	13 mar 2009
Kirsten	170640-xxxx	69	0.062 ↓		4.9 ↑	*			95/60	0	19		bt	hosp	6	
Tina	090257-xxxx	53	0.062		4.9	*	yes		128/94	0	25	yes	bt	GP	2	18 mar 2009
Bente	150268-xxxx	42	0.070		4.7			yes	148/89	2			bt	GP	2	
Henrik	261128-xxxx	81	0.089	i	4.7 ↓	*		yes	130/75	2	30		bt	GP	11	6 nov 2008
Bjarne	050942-xxxx	67	0.078	p	4.7	3.1	yes	yes	150/80	1	35		bt	GP	9	

[†] Has received a prescription within the last 2 years. A star * indicates that measurement is made, but the result is not usable. An arrow shows that there has been a change in the measured value since the previous control, green arrow indicates improvement while red arrow indicates worsening. All personal names in this demo are constructed

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