The Danish Palliative Care Database (DPD): research perspectives

#### Mogens Grønvold Danish Multidisciplinary Cancer Group

for Palliative Care



### History of DPC

Afgrænsning og indhold af

Dansk Palliativ Database

Revideret beskrivelse efter høring

O<sub>ktober</sub> 2009

- 2006
  - Application
- 2007
  - Grant from Ministry of Health
- 2007-2008
  - 9 meetings in steering committee (14 persons
  - Litterature review
- 2008
  - Proposal in public consultation
- 2009
  - National meeting, revision
  - Approved Danish Board of Health
  - Funding from hospital owners ('Danske Regioner')
- 2010
  - Opening
- 2011
  - First report (due in a few weeks)

#### DMCG-PAL

### Aims of DPD

- A national clinical quality development database for specialised palliative care
- A national research database



#### **DPD** inclusion criteria

- All patients referred to specialised palliative care (hospice, palliative care team, palliative care unit) from 1 January 2010
- Each patient registered once per institution
- 'DPD Report 2010':
  - cancer patients only (96%)
  - Patients who were referred AND died in 2010



### DPD data sources

- 1. Web-based reporting from the 36 institutions:
  - Basic clinical and sociodemographic variables
  - Variables about referral, dates start of treatment
  - Multidisciplinary conference
  - EORTC QLQ-C15-PAL at admission



Funktioner Patient Skema Hjælp		tieto.com KMS 1.5	
Indtast CPR nr.: Patient: yγ, xx (101010-12) Find Kontakt: 01-02-10:			
Skema udfyldelse.			
< Palliativ database   Print Slet Gem Gem & for	rlad Indiever Indiever & forlad 7		
Palliativ database		<b></b>	
Henvisning	EORTC-skema		
Henvist fra C Egen læge C Anden palliativ enhed C Praktiserende C patientan selv eller specialiæge Dårørende	EORTC- C Da C Nej - afslag skema udfyldt C Nej - for dårlig C Nej - ikke begrundet		
Sygehusafdeling C Anden	1. Kort tur C 1 C 2 C 3 C 4	C Uoplyst	
Diagnose (intet valgt)  (7)	2. Ligge i C 1 C Z C 3 C 4	C Uoplyst	
Dato Vis kalender (modtaget) (7)	3. Brug for C 1 C 2 C 3 C 4	C Uoplyst	
Palliativ indsats	4. Andenød C 1 C 2 C 3 C 4	C Uoplyst	
Paliativ 💽 Ja 🖸 Nej indsats startet	5. Smerter $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$ 6. $\bigcirc 1 \bigcirc 2 \bigcirc 3 \bigcirc 4$	C Uoplyst	
Dato for Vis kalender	Søvnbesvær 🛄 1 🛄 2 🛄 3 🛄 4	C Uoplyst	
start of palliativ indsats	7. Følt dig C 1 C 2 C 3 C 4	C Uoplyst	
Første kontakt(?) 🦳 Ambulant 🎦 Indlæggelse	8. Savnet C 1 C Z C 3 C 4 appetit	C Uoplyst	
Afsluttet C som død C I live	9. Kvalme C 1 C 2 C 3 C 4	C Uoplyst	
Socialt	10. Forstoppelse C 1 C 2 C 3 C 4	C Uoplyst	
Børn Cingen C Børn, mindst et barn C Børn, alle mindst under 18 år 18 år	11. Træt C 1 C 2 C 3 C 4	C Uoplyst	
Bopæl 💽 Privat 🖸 Plejshjem/ældrsbolig 💽 Andet	12. Vansk. C 1 C 2 C 3 C 4 smerter	C Uoplyst	
Tværfaglig (intet valgt)	13. Anspændt C 1 C 2 C 3 C 4	C Uoplyst	
Dato far Vis kalender konference	14. Deprimeret C 1 C 2 C 3 C 4	C Uoplyst	
	15. Livskvalitet C 1 C 2 C 3 C 4 C 5 C 6 C 7	C Uoplyst	
	Andre 🖸 Ja 🔽 Nej		
	Udfyldt med 👩 Ja 🧖 Nej 🚺 Uoplyst hjælp		
	Dato Vis kalender (EORTC		
4	score)(?)	×   }	

# DPD data sources

- 1. Web-based reporting from the 36 institutions:
  - Basic clinical and sociodemographic variables
  - Variables about referral, dates start of treatment
  - Multidisciplinary conference
  - EORTC QLQ-C30 at admission
- 2. Register-based data (palliative care activity, etc.)



#### Results for the year 2010

 'DPD Report 2010' not yet published, i.e. still preliminary

Dansk Palliativ Database

#### Årsrapport 2010

Foreløbig udgave 1. juli 2011





Sekretariatet for DMCG-PAL/Dansk Palliativ Database Forskningsenheden, Palliativ medicinsk afdeling Bispebjerg Hospital

### **DPD** completeness

- 36/36 specialised palliative care institutions report their patients to DPD
- Validation against the Danish Patient Register: completeness > 95.7%
- Average completeness of DPD variables: 98.6%



#### Patients 2010





#### Patients 2010

	Referred N (%)
Patient courses	7,859 (100 %)
Unique patients	6,041 (100 %)



#### Patients 2010

	Received N (%)	Not received N (%)	Referred N (%)
Patient courses	5,336 (67.9 %)	2,523 (32.1 %)	7,859 (100 %)
Unique patients	4,241 (70.2 %)	1,800 (29.8 %)	6,041 (100 %)



# Survival from referral (days)

	Ν	Mean	Median
		mean	
Palliative team/ unit	3.692	48.8	30
Hospice	2.349	30.6	17
All	6.041	41.7	24



EORTC QLQ-C15- PAL scale (0-100)	n	DPD Mean score
Symptom scales (low score good)		
Pain	2,607	59
Dyspnea	2,594	39
Seeping difficulties	2,591	38
Appetite loss	2,593	62
Constipation	2,565	36
Nausea/vomiting	2,590	29
Fatigue	2,554	79
Function scales (high score good)		
Physical function	2,573	24
Emotional function	2,470	63
Overall quality of life	2,330	37

DPD: Danish Palliative Care Database



EORTC QLQ-C15- PAL	n	DPD Mean	KPV* Mean
scale (0-100)		score	score
Symptom scales (low score good)			
Pain	2,607	59	19
Dyspnea	2,594	39	16
Seeping difficulties	2,591	38	23
Appetite loss	2,593	62	12
Constipation	2,565	36	12
Nausea/vomiting	2,590	29	6
Fatigue	2,554	79	31
Function scales (high score good)			
Physical function	2,573	24	81
Emotional function	2,470	63	81
Overall quality of life	2,330	37	72

**DPD: Danish Palliative Care Database** 



KPV: KræftPatientens Verden, a cross-sectional survey of 2,245 randomly selected Danish cancer patients in all stages

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#### Indicator 1: Proportion of referred, relevant patients who were actually received in specialised palliative care (SPC)

	%	
Capital Region	66	
Region Zealand	88	$\checkmark$
Region South	71	
Region Mid Jutland	82	$\checkmark$
Region North Jutland	82	$\checkmark$
Denmark	77	$\checkmark$

Standard=75%



#### Indicator 2: Proportion of patients who waited less than 10 days before admission to SPC

	%	
Capital Region	70	
Region Zealand	86	
Region South	75	
Region Mid Jutland	90	$\checkmark$
Region North Jutland	88	
Denmark	82	

Standard=90%



# Indicator 3: Proportion of patients dying from cancer who were in contact with SPC

	Incidence pr. 100	
Capital Region	21	
Region Zealand	33	
Region South	27	
Region Mid Jutland	31	
Region North Jutland	32	
Denmark	28	

Standard=35%



#### Indicator 4: Proportion of patients who completed the EORTC QLQ-C15-PAL at admission

	%	
Capital Region	33	
Region Zealand	55	$\checkmark$
Region South	63	$\checkmark$
Region Mid Jutland	62	$\checkmark$
Region North Jutland	22	
Denmark	49	

Standard=50%



Indicator 5: Proportion of patients discussed at a multidisciplinary conference (with the presence of at least 4 professions)

	%	
Capital Region	27	
Region Zealand	34	
Region South	48	
Region Mid Jutland	37	
Region North Jutland	62	
Denmark	40	

Standard=80%

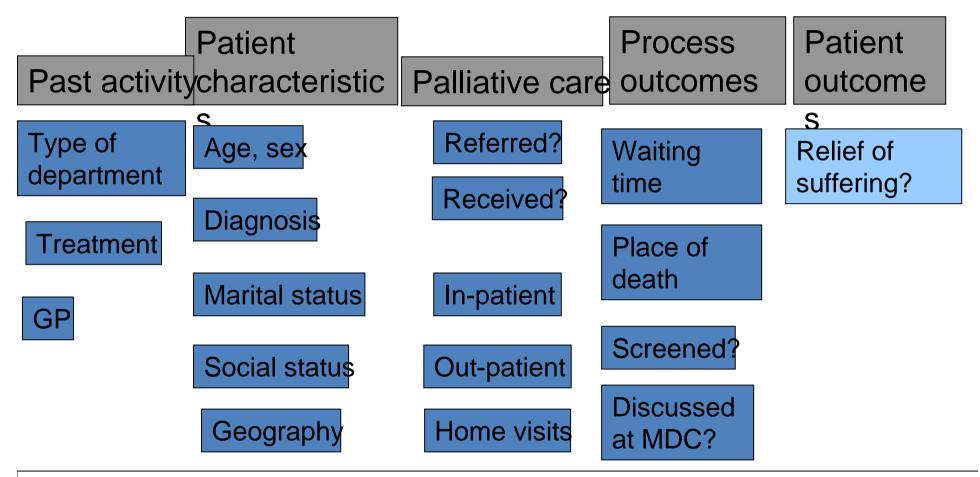


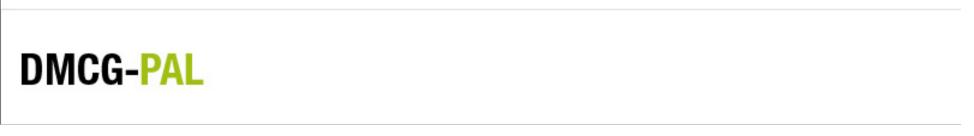
# Planned DPD research

- Understanding the relationships between
  - Patient characteristics (sociodemographic and clinical variables, symptomatology)
  - Geographical variations in palliative care (basic and specialised)
  - Quality of care
  - Place of death

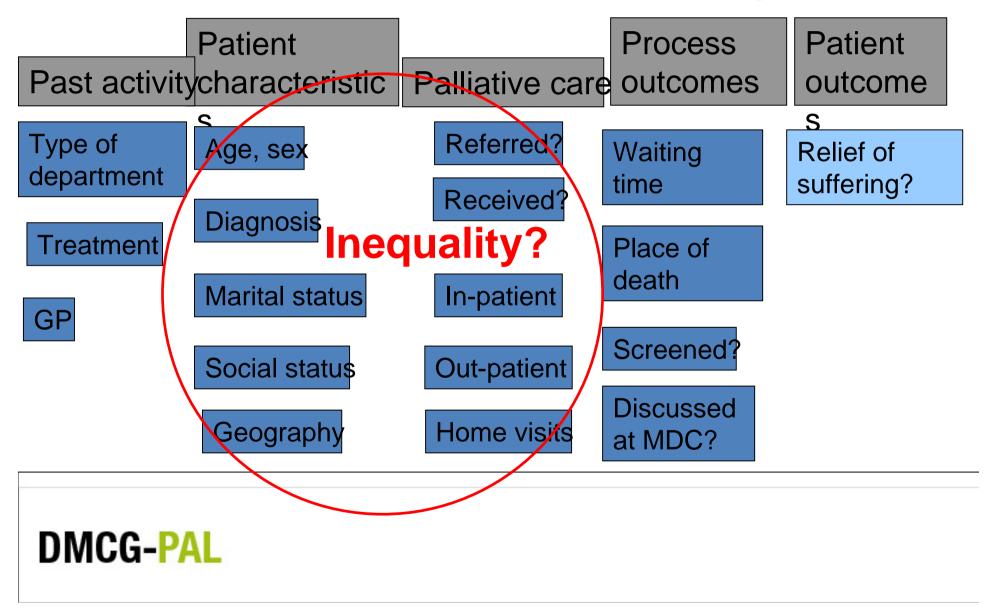
– Effect of palliative care (not yet included) **DMCC DMCC DMCC**

### What are the relationships?





### What are the relationships?



# Conclusions

- It proved possible to
  - Obtain consensus about content of a national database
  - Collect complete national data
- First year results
  - 28% of cancer patients got contact with SPC
  - Referred 24 days before death (median)
  - Large regional variation in quality (even larger variation between institutions)
  - Room for improvement
- Excellent basis for health services research
   DMCG-PAL