Sundhedsstyrelsen
National Board of Health

Integrated Cancer Pathways The Danish Experience

Cancer Care Ontario

Toronto - June 10th 2010

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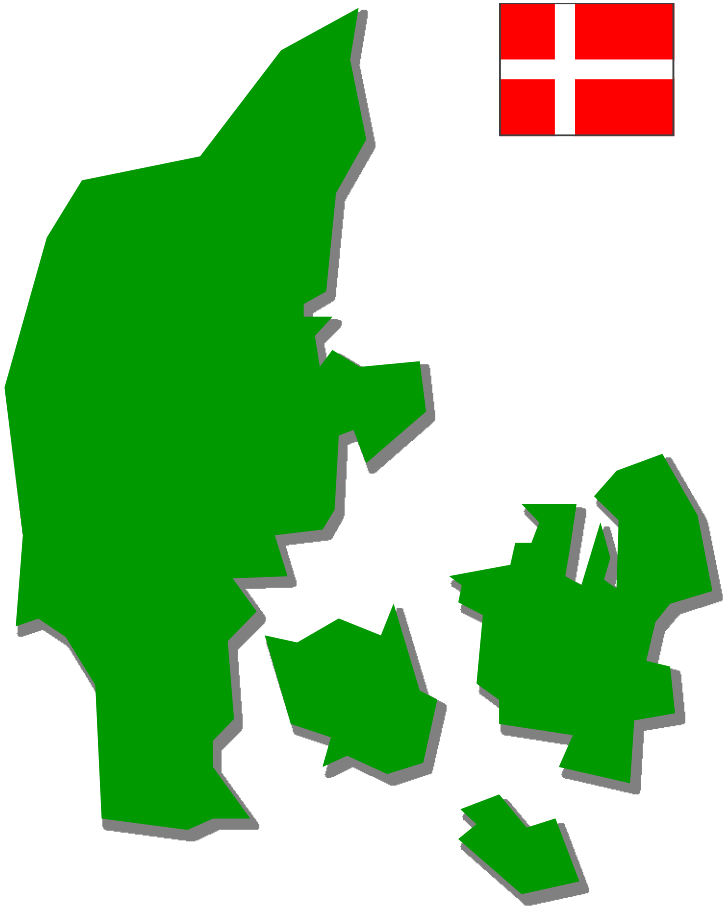
National Board of Health

Denmark



- 44 000 km^2
- 5.5 million inhabitants
- 5 regions:
  – hospitals and GPs
- 98 municipalities
  - nursing homes, home care

The Structure of the Danish Health Care Sector

- Ministry of the Interior and Health: Political management, prioritization, financial framework, legislation
- National Board of Health: Policy setting on health care activities. Independant councelling on the area of health (National authority under the auspices of the Ministry)
- The 5 Regions are responsible for the management of the hospitals, mental care, general practitioners and specialists in the primary health sector
- The 98 municipalities are responsible for major citizen related tasks: disease prevention, rehabilitation, and nursing

Background for the ICP initiative in 2007

Quality problems in cancer care in 2004:

National Cancer Plan II 2005 had a.o. asked for

- Improve surgical quality
- Integrated pathways – to remove intermediate wait times- Organised in a prebooked trains of diagnostics and treatment
- Danish Multidisciplinary Cancer Groups had been initialized
- Monitoring Quality of Cancer Care - Clinical Quality Databases
- National Clinical Guidelines (were limited)

  Sequence of disease groups

Implementation had since 2005 lost momentum

Background for the ICP initiative fall 2007 (2)

2006 – 2007 Radiation therapy capacity

2007 Huge wait time for all cancer patients

- New agreement between Government & Regions on ***acute care*** for cancer patients and patients suspected of cancer
- Wait times unbearable for staff - Need for change

2008 Huge wait time for diagnostics in non acute cardiac diseases

- New agreement between Government & Regions on Integrated Clinical Patways

Objectives ICP initiative fall 2007

Implement Integrated Clinical Pathways for all cancer patients by the end of 2008

- Pathway procedures must be undertaken 'acute' - i.e. maximum wait times that are professionally defined by clinicians
- Pathways must be integrated - i.e. based on National Clinical Guideline
- Monitor wait time in diagnostics - all patients suspected for cancer
- Monitor wait time in treatment - all CANCER patients
- All cancer patients must have a hospital contact person

- Implemented locally within three months after release from special Task Force for Cancer

Getting it done - 3 different types of groups (1)

National Cancer Advisory Committee (clinical focus) estd. 1998

- National Board of Health (chair)
- Ministry for Health and Prevention
- The Five Danish Regions and their Association of Danish Regions
- Association of Danish Municipalities
- Danish Multidisciplinary Cancer Groups
- Danish Cancer Society (**National cancer patient organisation**)
- National Institute of Public Health
- Danish Medicines Agency
- Danish Medical Society (8 pesrons)
- Danish Nursing Society (2)

National Task Force for Cancer Pathways (organizational focus) estd. 2007

- National Board of Health (chair – general director)
- Ministry for Health and Prevention
- The Five Danish Regions and the Association of Danish Regions (general directors)
- The Association of Danish Municipalities

(+ working group)

Getting it done - 3 different types of groups (2)

14 Cancer Disease Specific MULTIDISCIPLINARY Groups
each had representatives from

- Danish Multidisciplinary Cancer Group
- Clinicians from each of the 5 regions
- Scientific Society of the specialty (e.g. gynaecology)
- Oncology (with special interest in that specific disease)
- General Practice (with special interest in that specific disease)
- Pathology (with special interest in that specific disease)
- Radiology (+ if necessary other imaging specialty)
- Other relevant diagnostic and/or therapeutic societies

- National Board of Health (CHAIR + secretariat)

14 Multidisciplinary Disease Specific Groups

Develop 34 integrated cancer pathways (based on natioinal guidelines!)
1 Colorectal cancer
2 Lung cancer
3 Head and neck cancer
4 Breast cancer
5 Gynecologic cancer diseases
6 Leukemia Myelomatosis, acute leukemia, lymphomas and myelodysplastic syndrome
7 Cancer in the urinary system
8 Skin cancers Malignant melanoma, non malignant melanoma
9 Cerebral cancer and in the nervous system
10 Cancer in testicle, prostate and penis
11 Upper gastrointestinal cancer – liver and metastases, cystic duct, esophagus, cardia, stomach, pancreas
12 Cancer in children – leukemia, lymphatic cancer, tumor in chest, abdominal cavity, musculoskeletal system, abdominal and chest wall, brain and spine
13 Cancers of the eye - malignant melanoma uvea, orbital tumor, retinoblastoma
14 Cancers – orthopedics - osteosarcomas, soft tissue sarcomas, connective tissue

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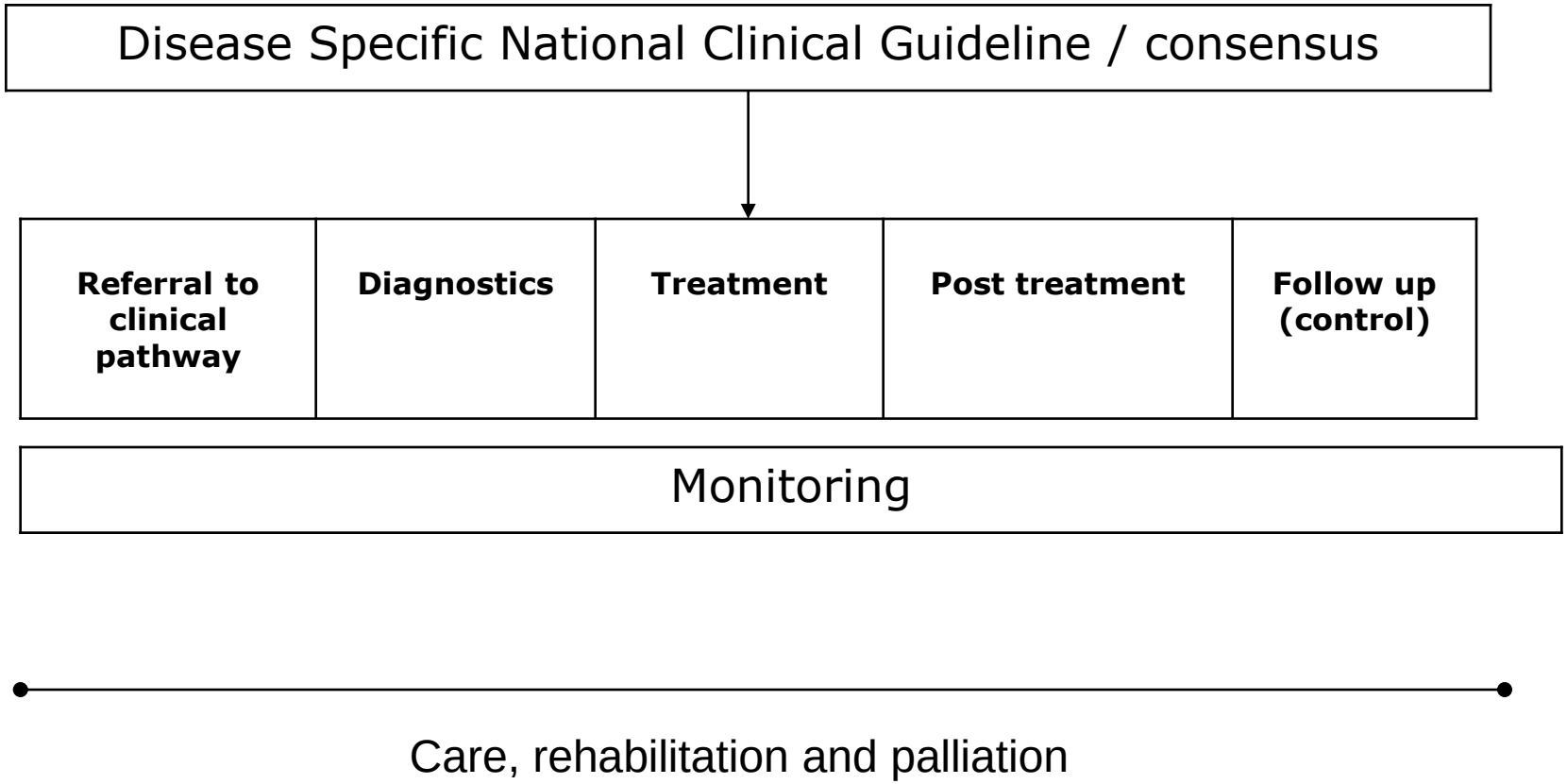
From National Clinical Guidelines - to Integrated Clinical Pathways



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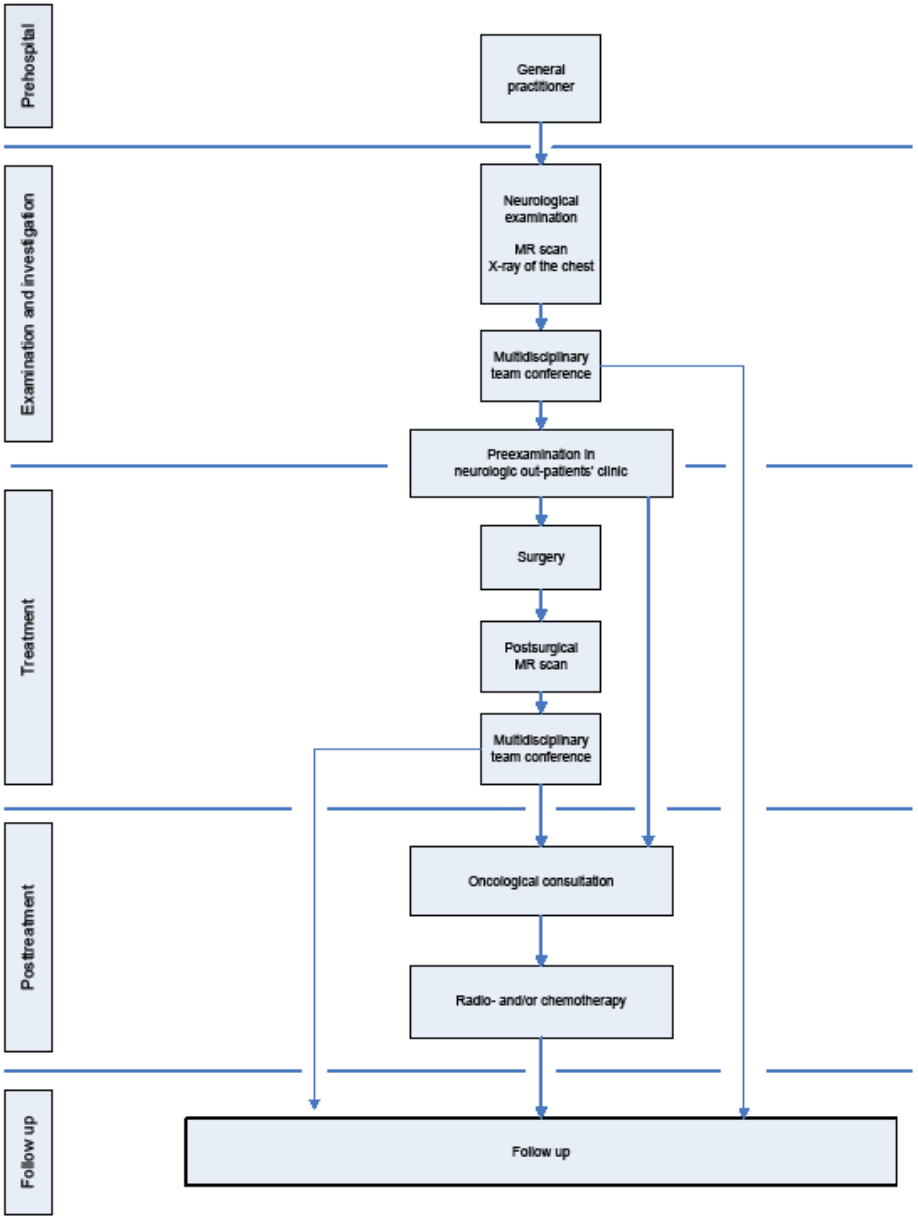
Clinical pathway for the standard cerebral cancer patient



Model of Integrated Clinical Pathway

ICP developed in dialogue with the first 4 clinical groups

- Pathway is the 'journey of the patient' all through
- Clinical criteria for GP's referral of suspected cancer
- Integrated with national clinical guideline or consensus
- Planned steps in Diagnostics and Treatment
- Train of open pre-booked appointments through D + T
- Standard maximum days for each phase of the pathway specified for the standard patient
- Clinical specialty responsibility stated
- Multidisciplinary team responsibility marked
- Patient information and consent marked at clinical decision points
- Monitoring Points defined

Overview of a integrated pathway for *cerebral cancer* patients (½ of 3 pages)

Clinical action	Logistic action	Information of the patient	Specialty responsible	Registration & Monitoring
Pre hospital				
Decision: General practitioner finds *criterion based suspicion* of cancer	▪Referral form is transmitted ▪Additional information, if any, is transmitted to department of neurology	▪Exclusion of cancer ▪Further planning of pathway	General Practitioner	
Referral to start at integrated pathway	▪Referral form received ▪Booking: Investigation and examination program	▪Call in: Investigation and examination and program	Neurologist	**A: Referral received**
Investigation and examination program: ▪Neurological examination ▪Electrocardiogram (ECG) ▪Blood tests ▪MR scan ▪X-ray of the chest		▪Further planning of pathway	Neurologist Radiologist	**B: Diagnosing begins** (first consultation)
Decision: ▪Referral to neurosurgeon	▪Booking: Pre investigation and examination in neurosurgical out-patients' clinic ▪Booking: out-patients' neurological treatment	▪Determination of diagnosis ▪Further planning of pathway ▪Call in: pre investigation and pre examination in neurological out-patients' clinic ▪Call in: follow up in neurological out-patients' clinic	Multi-disciplinary team	**C1: Diagnosis is confirmed or disproved**

34 Descriptions of Integrated Cancer Pathways (30 -45 p)

Common Template

- General Introduction
- GPs and referrals
- Diagnostics
- Treatment
- Post or secondary treatment
- Closing the pathway – follow up
- Rehabilitation
- Palliation
- General pathway remarks
  - co morbidity
  - information
  - relapse

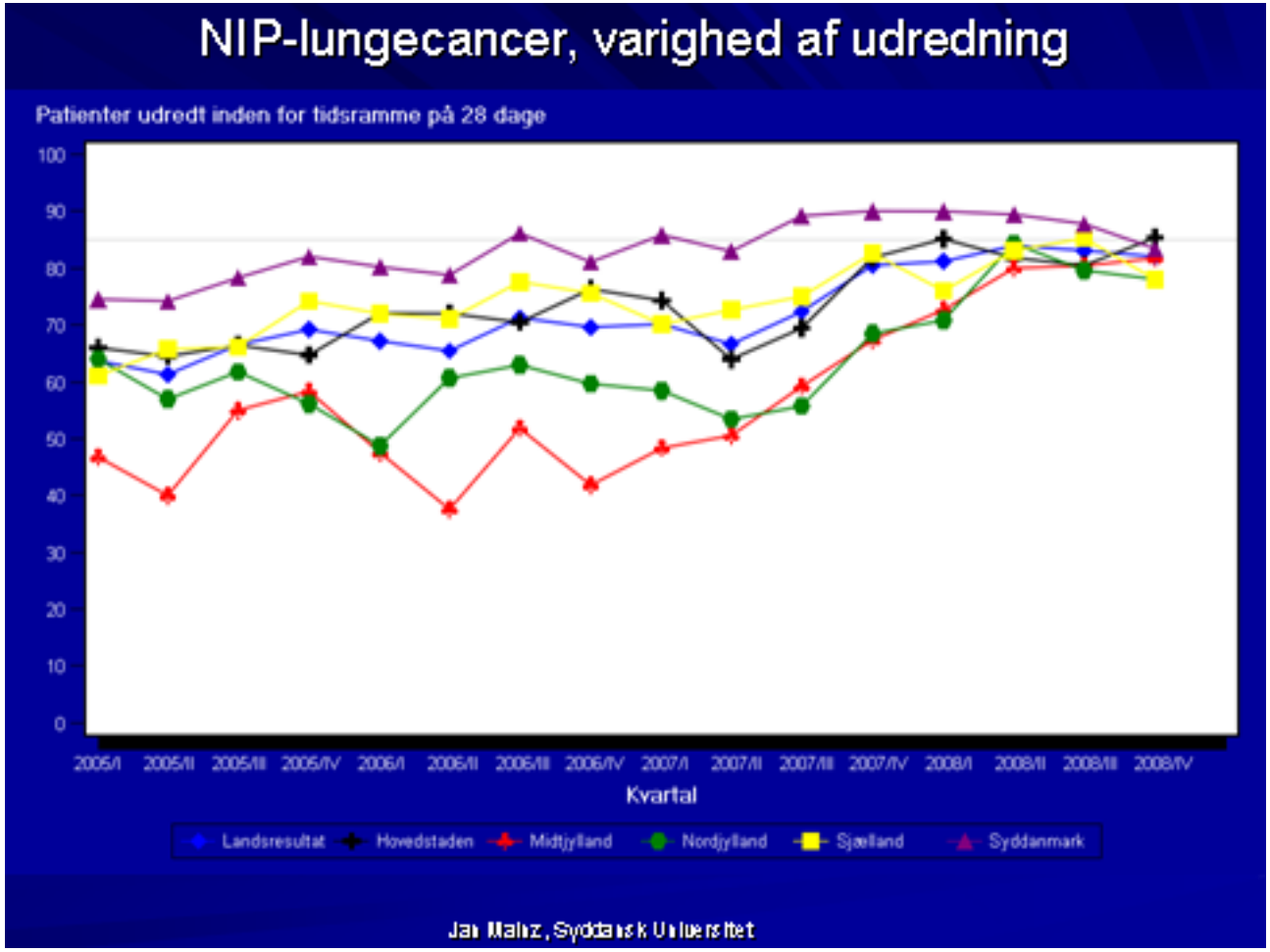
Challenges in development

- Lack of national guidelines, flow charts and clinical consensus
  - in some groups a very heavy proces
- Non-standard cancer patients
  - Establish cross specialty groups on
    - Co-morbidity
    - Unknown primary tumor
- Criteria for sufficient patient population to justify a standard clinical pathway necessary

Challenges in implementation

- Capacity based prioritizing among cancer patients versus other patient groups at department and hospital levels
- Co-morbidity a common and disease specific approach
- The balancing between the capacity situation, organizational changes and reducing wait times
  - money
  - shortness of staff
  - equipment (CAT scanners)

Monitoring challenges



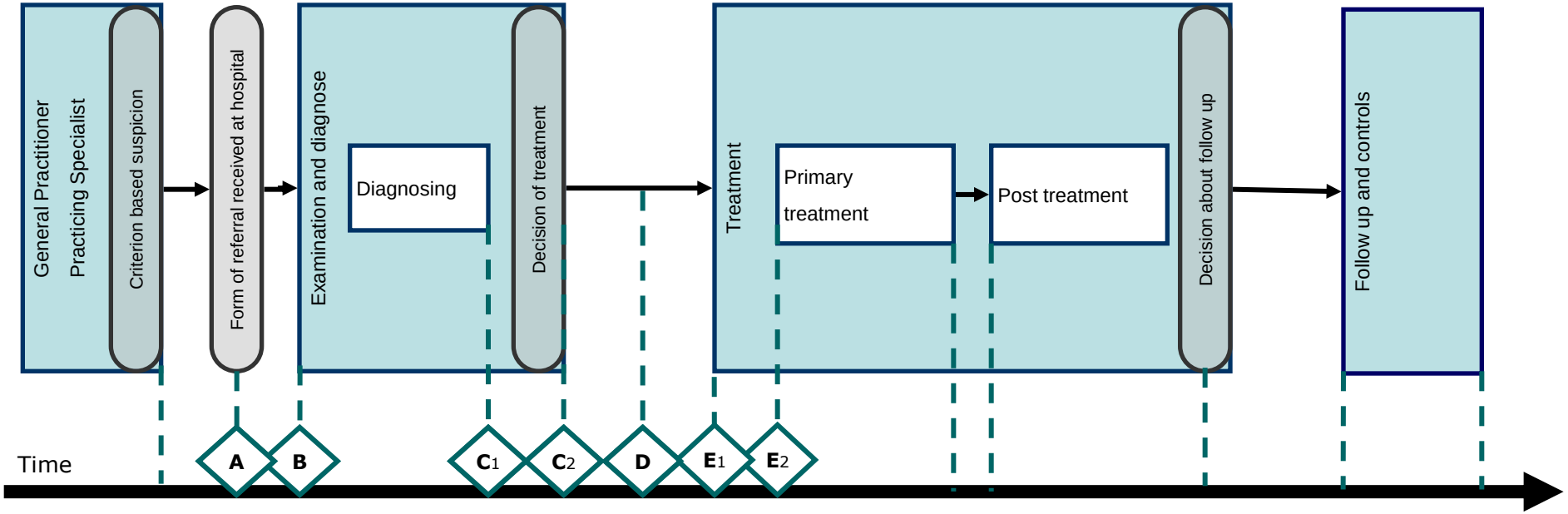
Objectives in Monitoring

Reduction in wait times – to be documented

(initial and intermediate) for all patients suspected of cancer

- Based on Administrative Data Systems
- Identifying ICP patients in the National Patient Registry
- Possibility of flagging of ICP patients
- Referrals form GPs vs from hospital departments
- Co Morbidity

Integrated pathways for cancer patients
– *fixed monitoring points*



A : Referral received
B : Diagnostics start
C1: Diagnosis disconfirmed
C2: Decision to treat

D : Informed consent
E1: Treatment start, organizational
E2: Treatment start, clinical

Establishing ideal times

- Synchronize the 14 Disease Specific Groups' way of computing number of days.
- Establish number of days needed to do things as fast as clinically feasible if everything worked out right, and do it without thinking of actual capacity problems
- Clinicians were skeptic, would they put themselves in a trap?
- Monitoring should be based on total number of days for the phase, and not on the detailed steps

Maximum Days for Phases

Phase in Pathway	Active Specialty	Procedure / Clinical Action	Process days
GP - HOSPITAL	Referral received - Diagnostics starts		4
DIAGNOSTICS	Sum of times for different diagnostic procedures		Σ
	Endoscopy		(1) 3
	Pathology	Fine needle sampling	2
		Smaller biopsies	4
		Larger biopsies and tissue lumps	7
	Diagnostic Imaging	Standard X-ray	(1) 2
	Extra time for diagnostic procedures	Co morbidity factors	X
TRANSITION		From diagnostics till start treatment	3
TREATMENT	Surgery	Preparing time for operation	3
	Oncology	Primary radiation therapy	8
		Primary chemo therapy	5
Patient time Information time Stabilizing time			X y Z

Challenges in Monitoring

- Include the registration and monitoring early in the pathway development
- Understanding of strengths and weaknesses of using existing registries is essential
- Transitional Questionnaire Reporting
- Shift in ambitions – backtracking in NPR
- Prioritize cooperation with Clinical Quality Databases

Conclusions - ICP - Changes and Improvements

- National use of the same clinical guideline (clinical quality)
- Multi Disciplinary Team
- General Practitioner use *Criteria Based Suspicion* referrals
- Reduction in wait times
- Increased job satisfaction after introduction

Conclusions - ICP - Changes and Improvements

- The involvement of the medical societies was very important
- Monitoring model is not yet finalised but essential in order to show results in wait time and clinical quality
- Total pressure on the health system makes it hard to keep up the initial good results
- Political priority and government funding can make a difference if…
- Important to incorporate patient involvement in further development implementation of pathways

Next steps

- Revision and update of all 34 integrated pathways for cancer patients
- Integration of clinical quality databases into the monitoring model for integrated pathways for cancer patients
- Evaluation of integrated pathways for cancer patients (development process, implementation, impact etc.)

Spin offs

- GP and hospital cooperation framework enhancement
- Lack of evidence in controls / follow up has initiated an HTA case study in Ovarian cancer
- Initiatives in research in follow up
- Revise follow up procedures for all cancers
- Rehabilitation working group has initiated development

National Cancer Plan III - expected 20??

- Background
  - Successful action have been taken on almost all areas of recommendations in National Cancer Plan II (2005)
  - The focus on high quality in diagnostics and treatment and the focus on the patient journey should be sustained

- Expected focus areas
  - Prevention of cancer
  - Early diagnosis of cancer
  - Rehabilitation of cancer patients
  - Palliation of cancer patients
  - Patient involvement

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Integrated Clinical Pathways for Cancer Patients

Questions and Comments
are welcome

Thank you

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