

MULTIDISCIPLINARY TEAM (MDT) IN CANCER TREATMENTS

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TERMS

- Multidisciplinary Team (MDT)
- Multidisciplinary Care (MDC)
- Multidisciplinary Treatment Planning
- Multidisciplinary Clinic

MULTIDISCIPLINARY CANCER CARE

MDC is defined as:

- ❑ *An integrated team approach to health care, in which, medical and allied health care professionals consider all relevant treatment options and develop collaboratively an individual treatment plan for each patient.*

BACKGROUND

- Cancer care can be complex
- Large number and range of healthcare providers may be involved → poor communication and poor coordination.
- Team approach:
 - Treatment planning – Care - Follow up of cancer patients
- MDT practice is quite entrenched in UK, Europe, Australia, Canada, US, but.....
- **...less common in Asia**

Best Practice Models for MDT

1. Multidisciplinary Clinics Staffed: a mix of different health professionals
2. MDT that hold regular meetings to discuss patient care plans prospectively.

1 & 2 Tumour Organ Specific

Meeting:

- Metropolitan hospital: weekly
- Smaller community: monthly
- Rural hospitals: linked to metropolitan cancer centres for regular meetings through teleconference or videoconferencing.

Benefit of MDT

For patients	For health professionals
<ul style="list-style-type: none">• ↑survival	<ul style="list-style-type: none">• ↑patient care and outcomes
<ul style="list-style-type: none">• ↓timeframes from diagnosis to treatment	<ul style="list-style-type: none">• Streamlined treatment pathway
<ul style="list-style-type: none">• Greater likelihood of receiving care in accord guidelines	<ul style="list-style-type: none">• Educational opportunities for health professionals
<ul style="list-style-type: none">• ↑access to information	<ul style="list-style-type: none">• Improve coordination of care
<ul style="list-style-type: none">• ↑satisfaction with treatment and care	<ul style="list-style-type: none">• ↑mental well-being of health professionals

Composition of MDT



Core members:

- Medical Oncologist
- Surgical Oncologist
- Radiation Oncologist
- Pathologist
- Radiologist
- MDT coordinator or Nurse

Support Staff

- Specialist nurses
- Physiotherapist
- Psychologist
- Dietician
- Palliative care clinician or nurses

INDONESIA:

Estimated incidence Rates by Site per 100,000, 2008

Cancer	Total/M (145.9)	Cancer	Total /F (144.6)
Lung	29.7	Breast	36.9
Colorectal	19.1	Colorectal	15.6
Mouth	13.7	Cervix	12.7
Prostate	10.6	Lung	10.9
Liver	10.3	Ovary	8.8

The burden of Cancer in Member Countries of the Association of Southeast Nations (ASEAN)
Asian Pacific Journal of Cancer Prevention 2012;13:411-420.

INDONESIA:

Estimated Mortality Rates by Site per 100,000, 2008

Cancer	Total/M (120.0)	Cancer	Total /F (98.2)
Lung	27.8	Breast	18.6
Colorectal	14.5	Colorectal	11.7
Liver	10.0	Lung	10.1
Prostate	8.0	Cervix	7.0
Leukemia	5.4	Ovary	6.6

The burden of Cancer in Member Countries of the Association of Southeast Nations (ASEAN) Asian Pacific Journal of Cancer Prevention 2012;13:411-420.



Riset Kesehatan Dasar



2013



**Jumlah penduduk
249.9 juta**

**Estimasi kanker
1.4‰
347.792**

Survei berskala Nasional yang dilaksanakan oleh Badan Penelitian dan Pengembangan Kesehatan, Kemenkes RI secara berkala untuk memantau indikator kesehatan seluruh wilayah Indonesia

INDONESIA: Prevalensi dan Estimasi Jumlah Penderita Penyakit Kanker menurut Provinsi 2013



Indonesia (1.4‰)
347.792

DI Yogyakarta: 4.1‰
(14.596)

Jawa Tengah: 2.1‰
(68.638)

Jawa Timur: 1.6‰
(61.230)

Gorontalo (0.2‰)
222

Papua Barat (0.6‰)
508

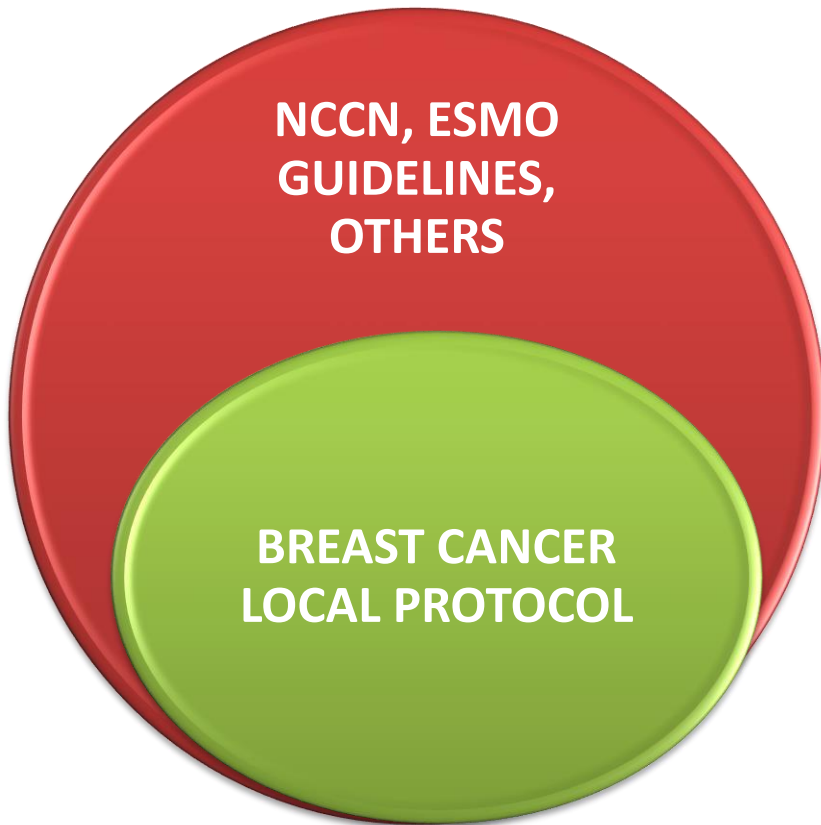
Prevalensi dan Estimasi Jumlah Penderita Penyakit Kanker Serviks, Payudara dan Prostat 2013

Serviks (‰/absolut)	Payudara(‰/absolut)	Prostat (‰/absolut)
Kep. Riau: 1.5 (1.416)	DI Yogya: 2.4 (4.325)	DI Yogya: 0.5 (879)
Maluku Ut: 1.5 (819)		Bali : 0.5 (1.043)
DI Yogya: 1.5 (2.703)		Sul. Ut: 0.5 (601)
		Sul. Sel : 0.5 (2.027)
JATENG		
1.2 (19.734)	0.7 (11.511)	0.2 (3.248)
INDONESIA		
0.8 (98.692)	0.5 (61.682)	0.2 (25.012)

Sumber: Infodatin. Pusat Data dan Informasi Kementerian Kesehatan RI

Jumlah penduduk Jateng (2013): 32.684.218

Example: MDT membership for treatment planning BREAST CANCER



Core team members:

- Medical Oncologist
- Surgical Oncologist
- Radiation Oncologist
- Pathologist
- Radiologist
- MDT coordinator or Nurse

Non-core team members

- Nuclear Medicine
- Plastic surgery
- Physiotherapist
- Psychologist

Infrastructure and Tools

- Meeting room with adequate facilities (projection equipment for displaying medical imaging and pathology slides, as well as secure interactive computer systems.
- Teleconference or videoconference facilities
- Telemedicine is cost effective

Barriers

- Lack of time
- Workforce resources
- Poor **transitioning** of care
- Inadequate **communication** between specialists and primary care
- Implementing **comprehensive MTD meetings**
- Managing scarce resources
- Inequitable access to specialist care
- Poor attendance by key staff
- Hierarchical boundaries

Walsh J, et al. BMC Health Service Research 2010;10.132.

Lamb BW, et al. World J Surg;35:1970-1976.

Requirements of an effective MDT

- Good leadership
- Engaged core membership
- Good team dynamics
- Administrative support and processes
- Good communication and follow-up
- Guidelines and standards
- Recording and communicating treatment decisions
- Involvement of allied health and support staff
- Protected time
- Appropriate infrastructure
- Involvement of the patient
- Institutional support and funding
- Auditing of clinical activity and regular reporting of results

NOVEL TOOLS IN MDT

REGULATION

- Over 6 years, laws have been developed to regulate cancer care in **Belgium**. Seven oncology-specific laws have been put in place:
 - MOC: **Multidisciplinary Oncology Consultation**, and allowing reimbursement for MOC care
 - The MOC must be chaired by oncologists at least 2 other clinicians: **medical oncologist and/or radiation oncologist and/or oncology surgeon**
 - Almost all innovative and expensive drugs are reimbursed only if all members of the MOC team agree that they would benefit an individual patient.

REGULATION

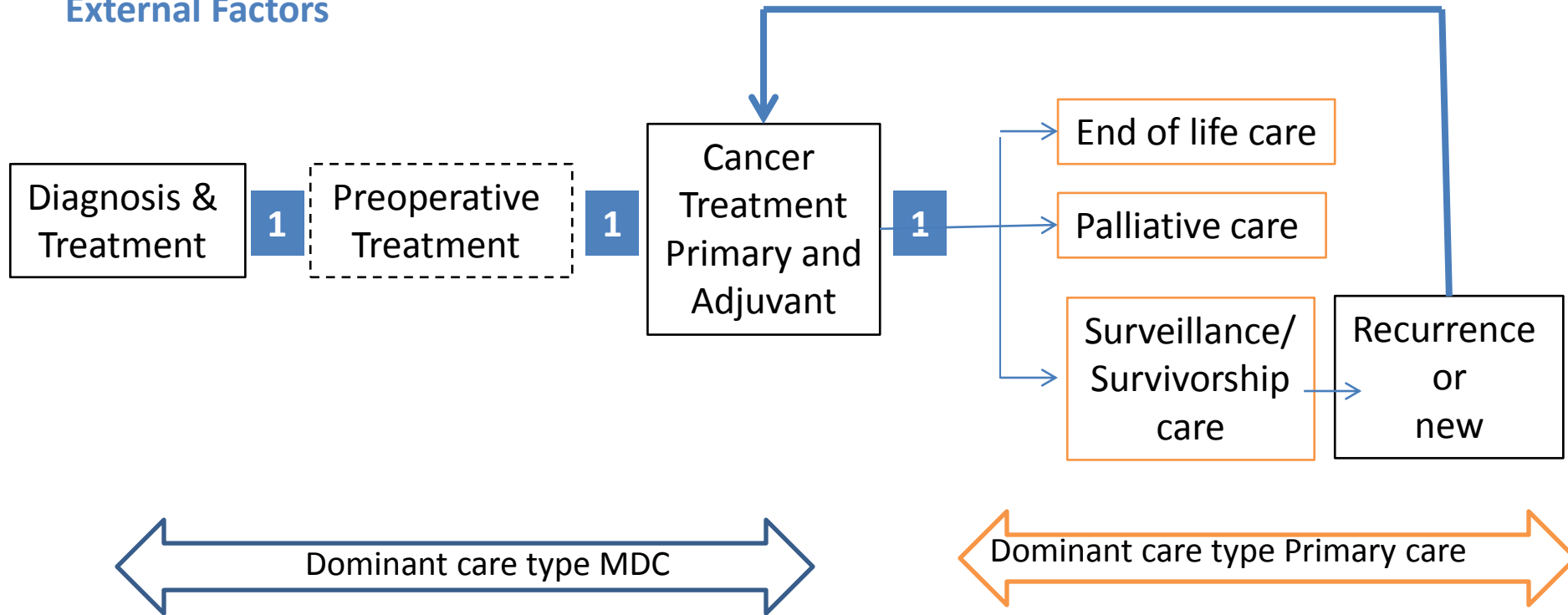
- The success of MDT partially attributable to **legal foundation and reimbursement**, and willingness of health professionals to accept the value of **MDT** approach in Belgium is, that they have one of the five survival rates of cancer patients in Europe.

REGULATION: in Indonesia

- MOC: may be a good model
- The MOC chair: at least two different oncologist: medical oncologist and/or oncology surgeon
- All innovative and expensive drugs will be reimbursed only if all members of the MOC team agree that they would benefit an individual patient
- Legal foundation and reimbursement in Indonesia: **JKN (Universal Health Coverage) and Health-BPJS**

Multidisciplinary treatment intervention across transition in cancer care

External Factors



Organisational context

- Care pathway when patient in remission
- 1** MDC intervention at transition in the cancer experience
- Phase not always necessary in planning treatment
- Iterative loop where MDC team can intervene in the event of recurrence or a new diagnosis

Role of Primary Care Providers

- Involvement of primary care providers during active cancer treatment: important
- Oral chemotherapeutic drugs, oral targeted therapies, hormonal agents are developed
- Internal Medicine/GP have a role in managing acute toxicities related to treatment
- Others: physiotherapist, occupational therapies, psychologist, counsellor, social workers, nutritionist have a role in helping patients manage symptoms, emotional consequences and impact on daily life.



Merancang Model MDT

- Latar belakang: MDT telah terbukti merupakan ‘kunci’ untuk dapat memberi pelayanan dan pengobatan kanker yang berkualitas tinggi.
- Ada berbagai model
- Berbeda antara: RS Nasional Pusat Rujukan Kanker – RS tipe A-Provinsi – tipe B/Daerah

Tim Multidisiplin Kanker Payudara

Anggota Tim Inti	Outcome
<ul style="list-style-type: none">▪ Dokter Bedah Onkologi▪ Dokter Penyakit Dalam Konsultan Hematologi-Onkologi Medik*▪ Dokter Radiasi Onkologi▪ Dokter Ahli Patologi Anatomi▪ Dokter Ahli Radiologi (diagnostik)▪ Dokter Umum**▪ Terapi suportif*	<ul style="list-style-type: none">▪ Tim Inti telah terbentuk dan dikenal

Dokter Penyakit Dalam Fellow Oncology, merangkap terapi suportif, dalam 'networking' dengan pusat rujukan yang lebih tinggi

Merancang Pertemuan MDT

- Tanggung jawab tim
- Tujuan Pertemuan dan frekuensi
- Protokol lokal

Leadership Tim dan koordinasi

Kepemimpinan tim merupakan aspek kunci yang membantu keberhasilan dan tetap terselenggaranya pertemuan. Ada beberapa bentuk leadership:

- Seorang ‘Champion’ : mereka yang selalu mendorong inisiatif dan integral dalam meningkatkan dan terus mendukung pertemuan
- Pimpinan rapat/pertemuan: mereka yang memfasilitasi diskusi dalam setiap pertemuan
- Koordinator pertemuan: mengkoordinasi keperluan logistik setiap pertemuan.

Koordinator Pertemuan

Mempunyai peran:

- Mengatur pertemuan
- Memilih pasien untuk diskusi
- Mencatat keluaran/hasil kasus yang didiskusikan
- Menginformasikan kepada klinisi yang mengobati pasien dan kepada dokter layanan primer yang mengirim pasien*

* Bilamana diperlukan

Timing of meetings

- Pertemuan dilaksanakan pada waktu dan tempat yang sama untuk menjaga rutinitas dan ketahanan MDT.
- Lama pertemuan disesuaikan besar/kecilnya institusi dan jumlah pasien yang perlu didiskusikan. Pada umumnya 45-90 menit.
- Bila tidak ada kasus yang didiskusikan , pertemuan diisi acara untuk tujuan edukasi atau diskusi topik/issue yang relevan
- Waktu yang dipilih cukup nyaman bagi mereka yang hadir.

TERIMA KASIH