



Models of Supportive Care

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Outline

1. Supportive care needs
2. Patient care models
3. Organizational models

Cancer and Morbidity

Cancer Related Complications

- Direct invasion
- Obstruction
- Compression
- Effusion
- Infections
- Thrombosis
- Bleeding
- Inflammation
- Paraneoplastic

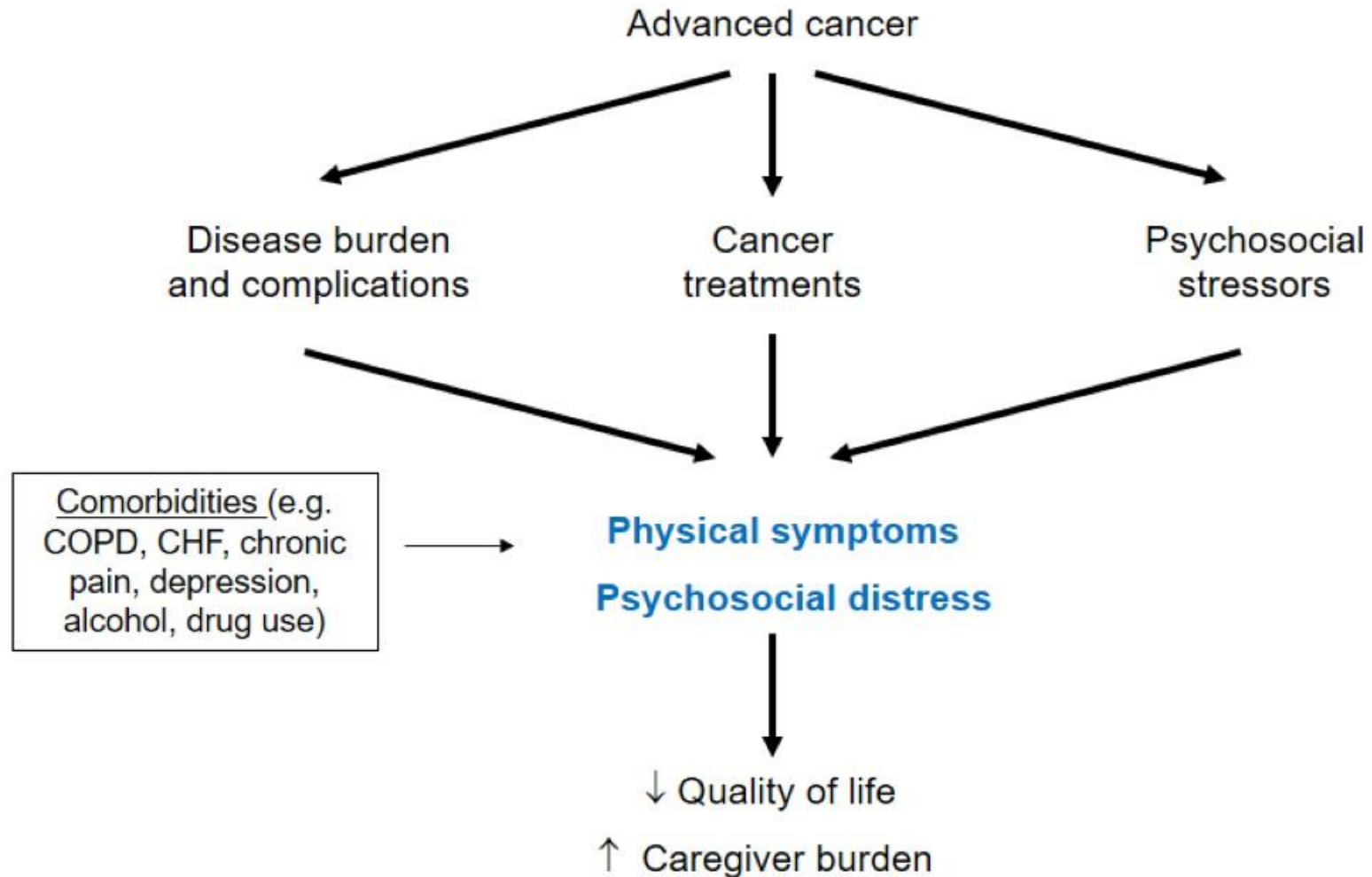
Treatment Adverse Effects

- Cardiac
- Pulmonary
- Gastrointestinal
- Hematologic
- Infections
- Musculoskeletal
- Neurologic
- Endocrine
- Dermatologic

Psychosocial Stressors

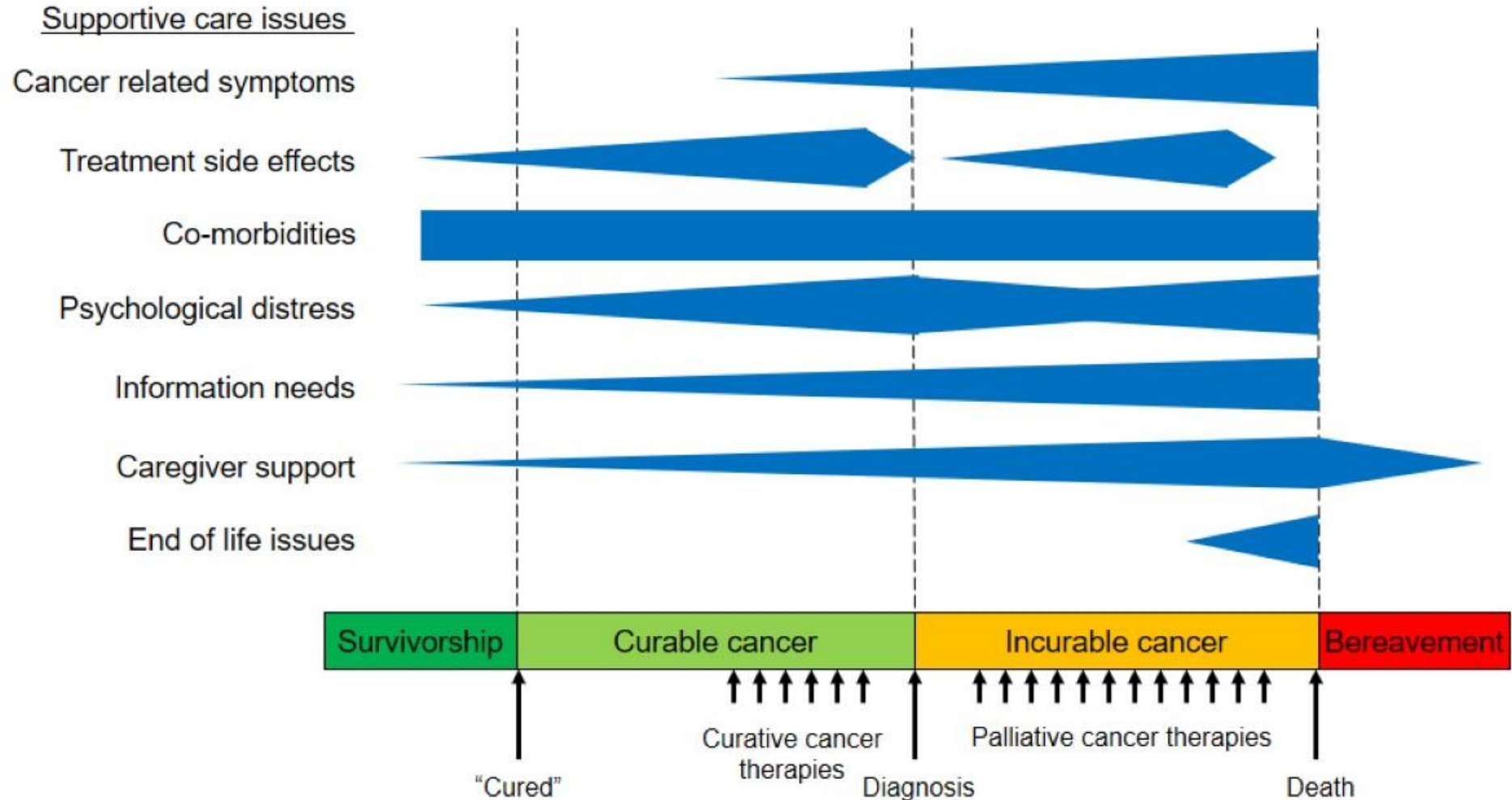
- Life limiting dx
- Fear of cancer progression
- Uncertainties
- Body image
- Loss of function
- Work/hobbies
- Family relations
- Spiritual concerns
- Financial stress

Cancer and Morbidity



Supportive Care Needs

Cancer Patients



Definition of Supportive Care

*“the provision of the necessary services for those living with or affected by cancer to meet their **informational, emotional, spiritual, social or physical need** during their diagnostic, treatment or follow-up phases encompassing issues of health promotion and prevention, survivorship, palliation and bereavement. . .”*

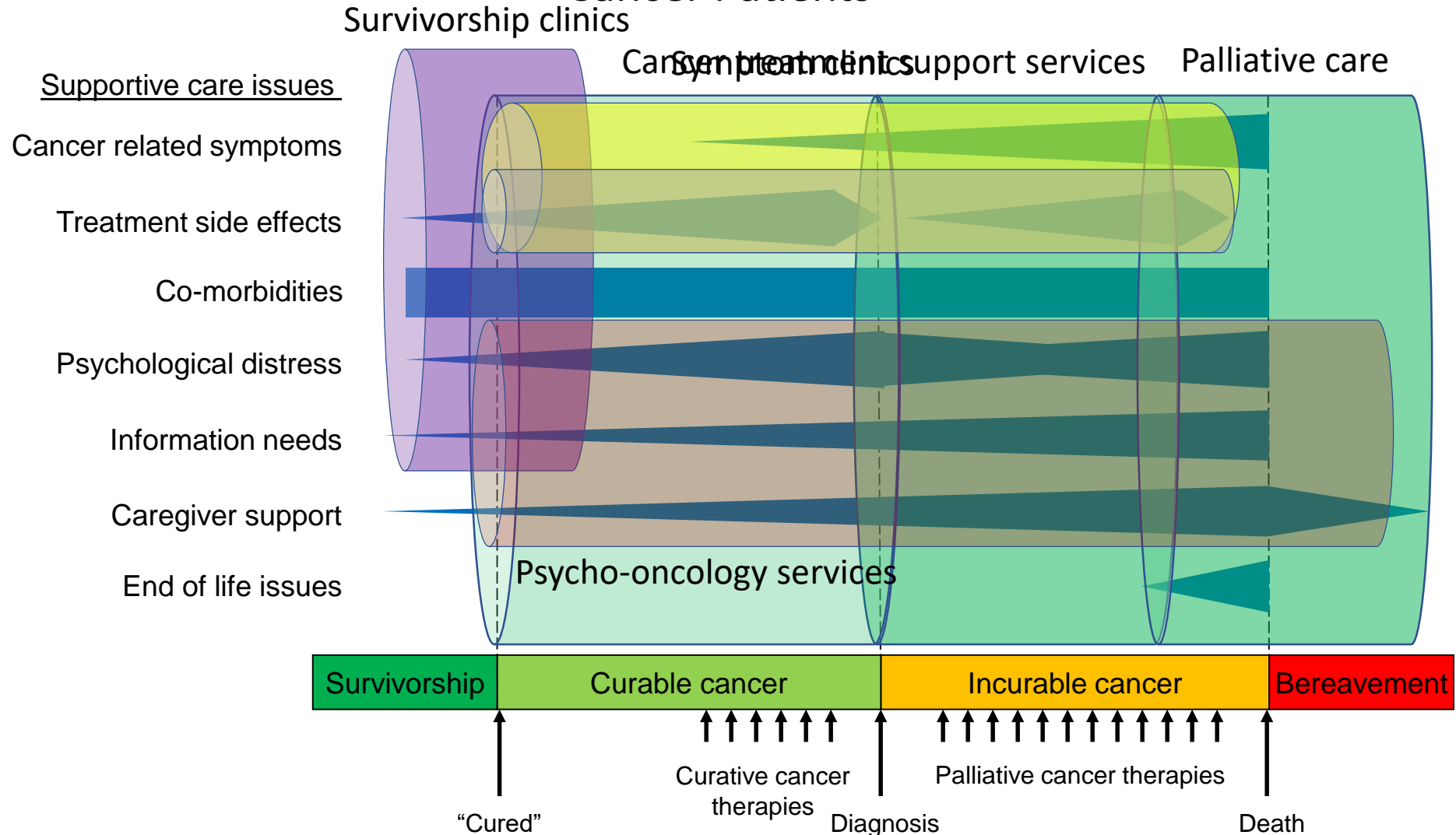
Fitch. Providing Supportive Care for Individuals Living with Cancer 1994

*“the **prevention and management of the adverse effects** of cancer and its treatment. This includes management of physical and psychological symptoms and side effects across the continuum of the cancer experience from diagnosis through treatment to post-treatment care. Enhancing **rehabilitation, secondary cancer prevention, survivorship, and end-of-life care** are integral to supportive care...”*

Multinational Association of Supportive Care in Cancer

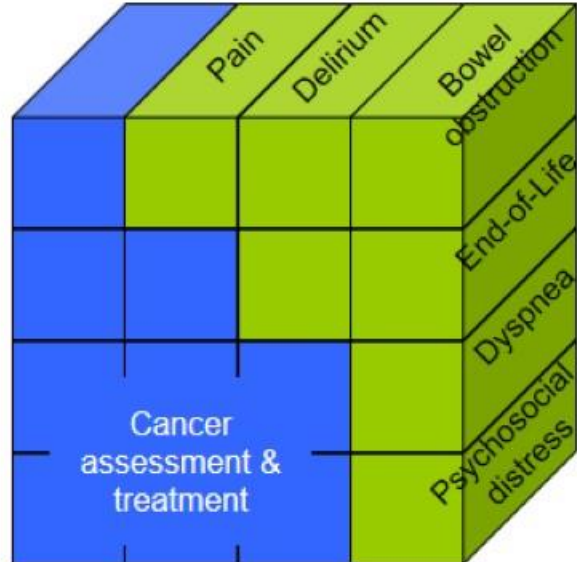
Supportive Care Needs

Cancer Patients



How can **oncologists** provide
better supportive care?

Need-Based Models

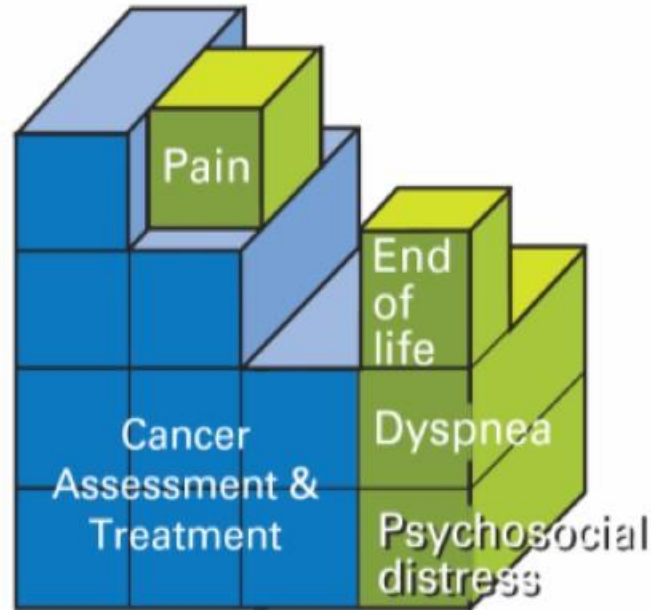


Need-Based Models

Solo Practice Model

Pros

- Continuity of care
- Timely management

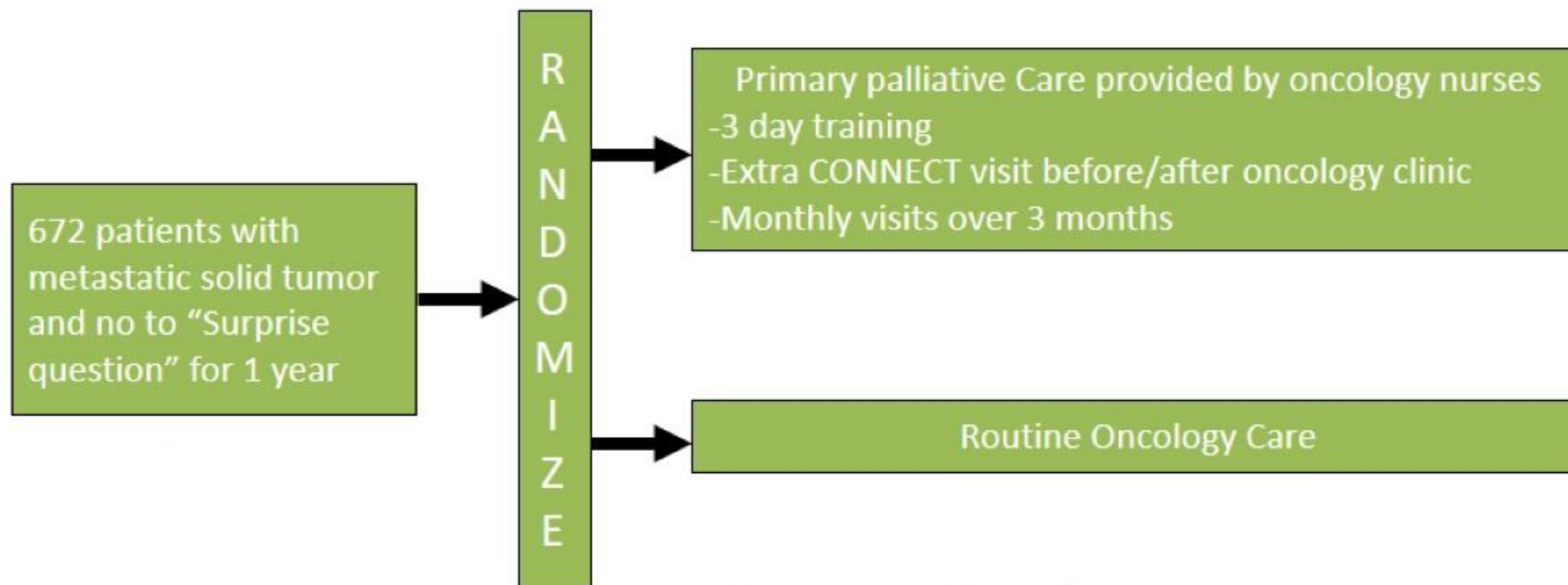


Cons

- Limited time
- Difficulty keeping up with the literature
- Under-diagnosis results in under-treatment
- Lack of an inter-professional team

Primary Palliative Care

Cluster Randomized Trial



Single blind study (interviewers)
Cluster RCT at 17 community sites
No specialist PC available
Estimated 40% attrition

Outcomes over 3 months

1. Change in FACIT-Pal (0-184)
2. ESAS (0-90)
3. HADS 0-21

Primary Palliative Care

Patients with Advanced Solid Tumors

Table 3. Unadjusted Mean Scores and Regression-Estimated Differences in Patient Quality of Life and Symptom Outcomes Between Groups at 3 Months

Measure	CONNECT group	Standard care group	Adjusted mean difference ^a	P value	ICC
Quality of life					
FACIT-Pal score ^b	130.7 (28.2)	134.1 (28.1)	1.20 (-2.75 to 5.15)	.55	0.020
Symptom burden					
ESAS score ^c	23.2 (16.6)	24.0 (16.1)	-2.64 (-5.85 to 0.58)	.11	0.013
Mood symptoms					
HADS ^d					
Depression subscale score	5.1 (3.4)	4.8 (3.7)	-0.08 (-0.71 to 0.57)	.82	0.007
Anxiety subscale score	5.7 (3.9)	5.4 (4.2)	-0.31 (-0.96 to 0.33)	.34	0.037

Even with a very carefully conducted primary palliative care intervention controlling for time, interest and training, patient outcomes did not improve

- Still limited PC dose, nurse only, duration – but this is likely the most possible
- Low symptom burden at baseline – need to focus on patients with need
- No specialist palliative care available – one of the most useful aspects of primary PC is to refer patients

Need-Based Models

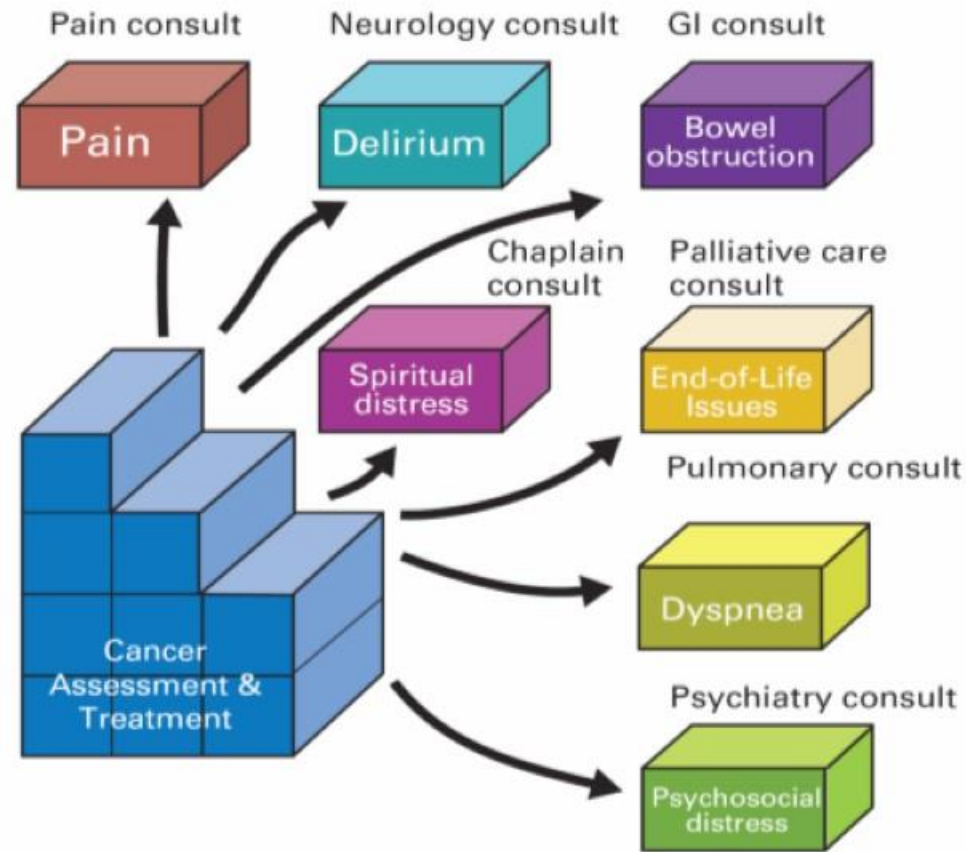
Congress Model

Pros

- Expert input

Cons

- Under-diagnosis results in under-treatment
- Loss in transition
- Potential team conflicts
- Financial burden

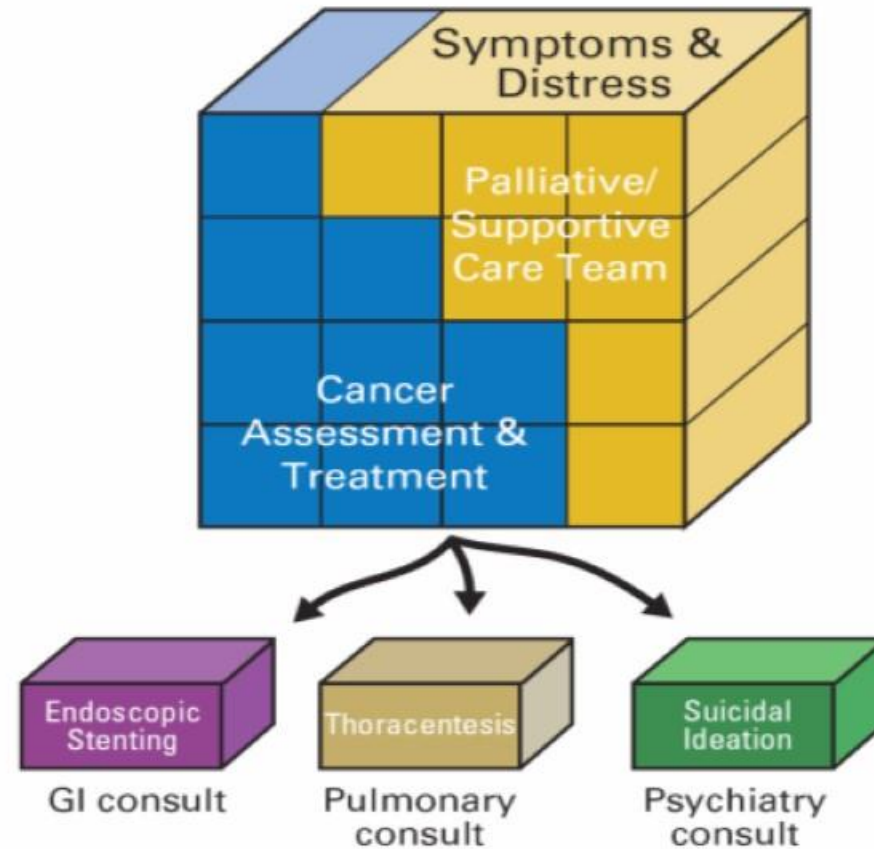


Need-Based Models

Integrated Care Model

Pros

- Continuity of care
- Timely management
- Comprehensive care



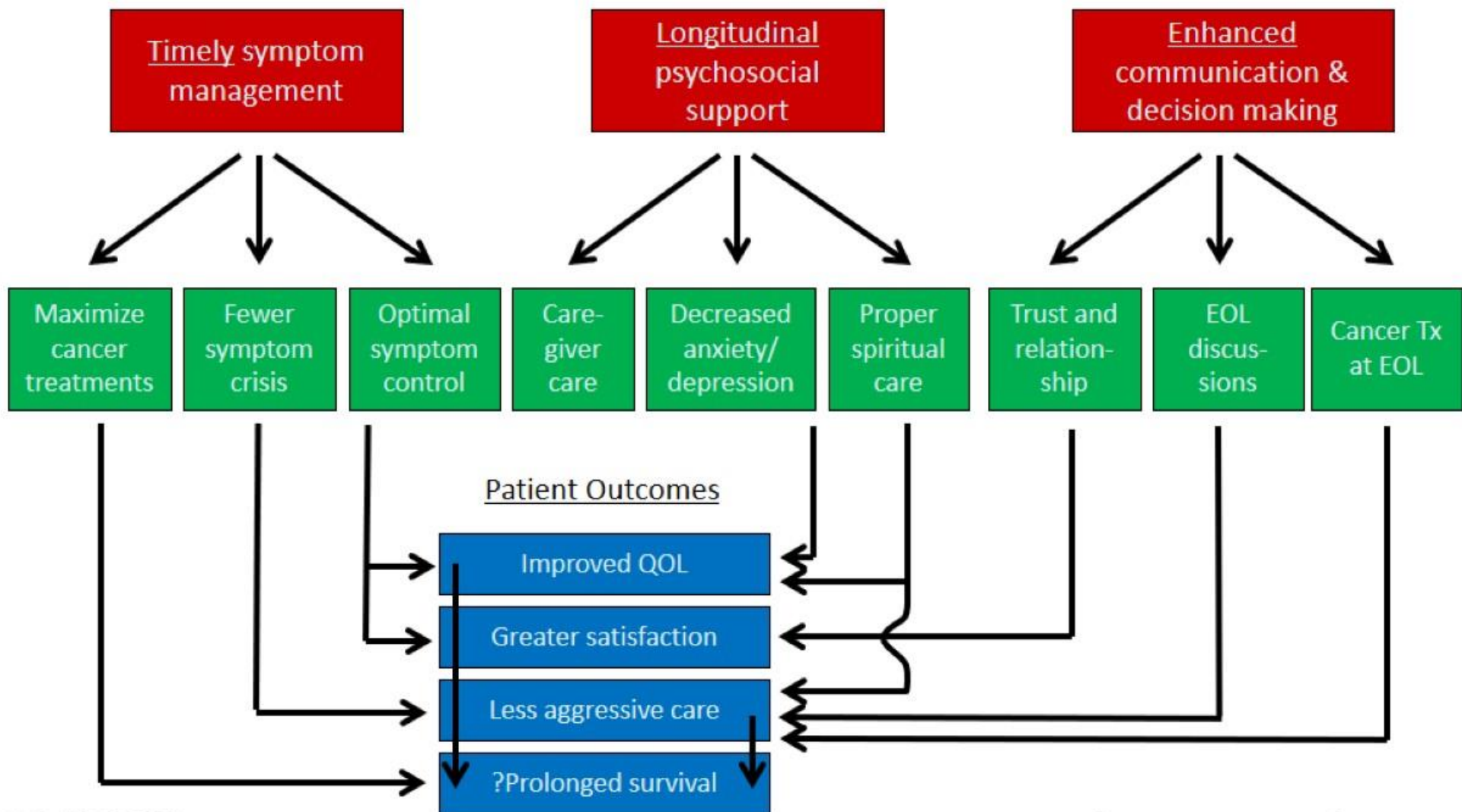
Benefits of Palliative Care

5 Meta-Analyses

	Patients	Setting	No. of studies	No. of patients	Quality of life SMD (95% CI)	Symptoms SMD (95% CI)	Mood SMD (95% CI)	Survival HR (95% CI)
Karalieratos JAMA 2016	Cancer and non-cancer	IP/OP	15	2355	0.46 (0.08-0.83)	-0.66 (-1.25, -0.07)		0.90 (0.69, 1.1)
	Cancer only	IP/OP	11	1670	0.12 (-0.2, 0.27)	-0.14 (-0.39, 0.10)		0.82 (0.60, 1.13)
Gartner BMJ 2017	Cancer and non-cancer	IP/OP	12	2454	0.16 (0.01, 0.31)	-0.38 (-0.82, 0.06)		
	Cancer only	IP/OP	5	828	0.20 (0.01, 0.38)	-0.21 (-1.35, 0.94)		
	Early only	OP	2	388	0.33 (0.05, 0.61)			
Haun Cochrane 2017	Cancer only	OP	7	1614	0.27 (0.15, 0.38)	-0.23 (-0.35, -0.10)	-0.11 (-0.26, 0.03)	0.85 (0.56, 1.28)
Heorger Ann Behav Med 2019	Cancer only	OP	8	2092	0.18 (0.09, 0.28)			1y: 14.1% (6.5%, 21.7%)
Fulton Palliat Med 2019	Cancer only	OP	10	2385	0.24 (0.13, 0.35)	-0.17 (-0.45, 0.11)	-0.09 (-0.32, 0.13)	0.84 (0.61, 1.18)

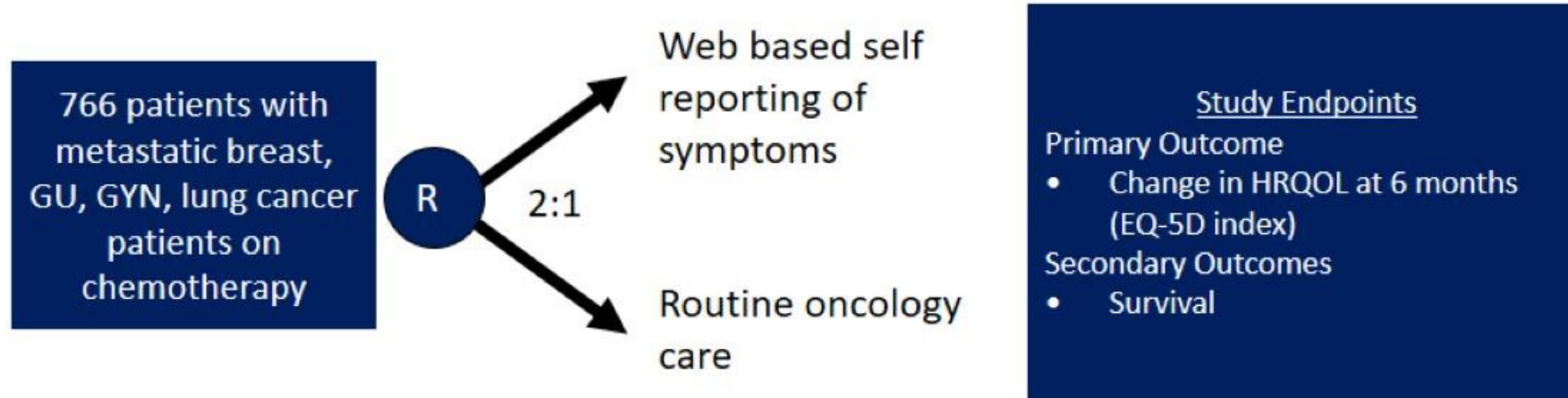
Timely Access to Palliative Care

Conceptual Framework



Randomized Controlled Trial

Routine Symptom Screening

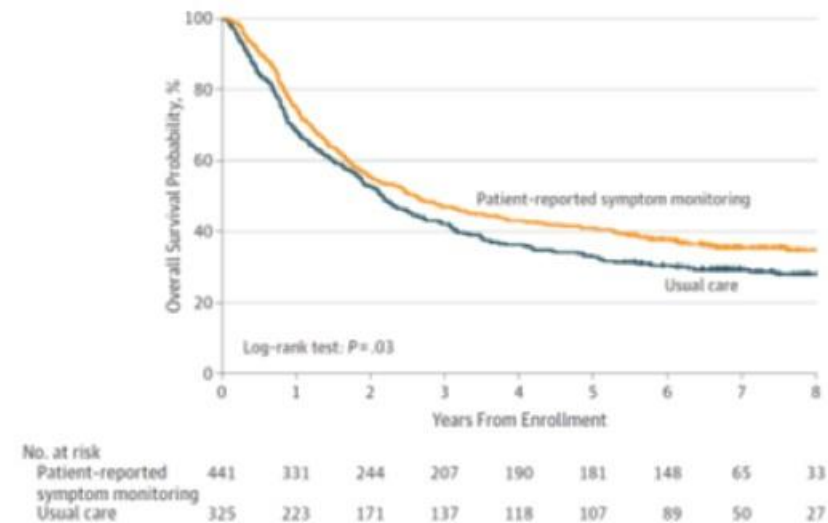
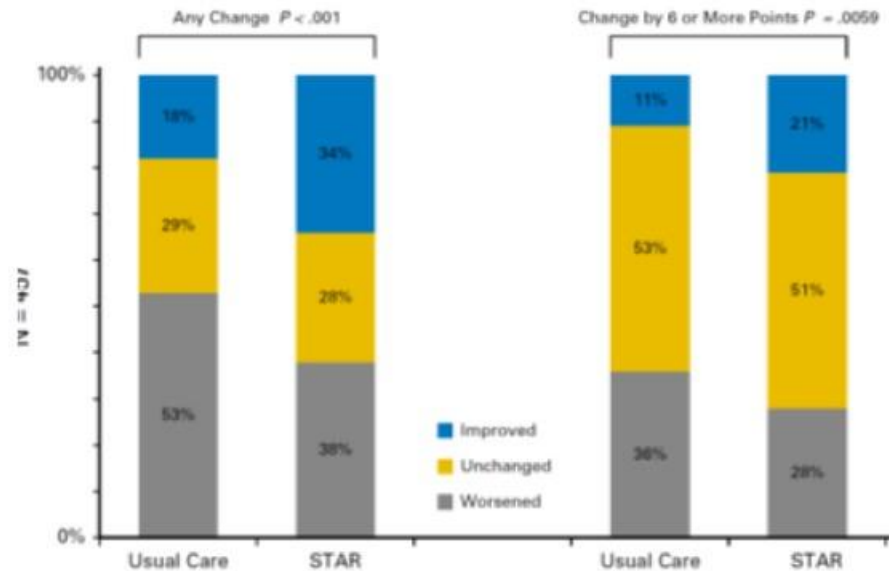


Symptom Tracking and Reporting Web-based interface

- 12 symptoms: Appetite loss, constipation, cough, diarrhea, dyspnea, dysuria, fatigue, hot flashes, nausea, pain, neuropathy, vomiting
- NCI CTCAE grading: 0 (absent) to 4 (disabling)
- Interface: touchscreen tablets or computer kiosks
- Frequency: at clinic visit and between visits (not mandatory)
- Action: e-mail alerts if worsened by 2+ points or absolute value ≥ 3

Randomized Controlled Trial

Routine Symptom Screening



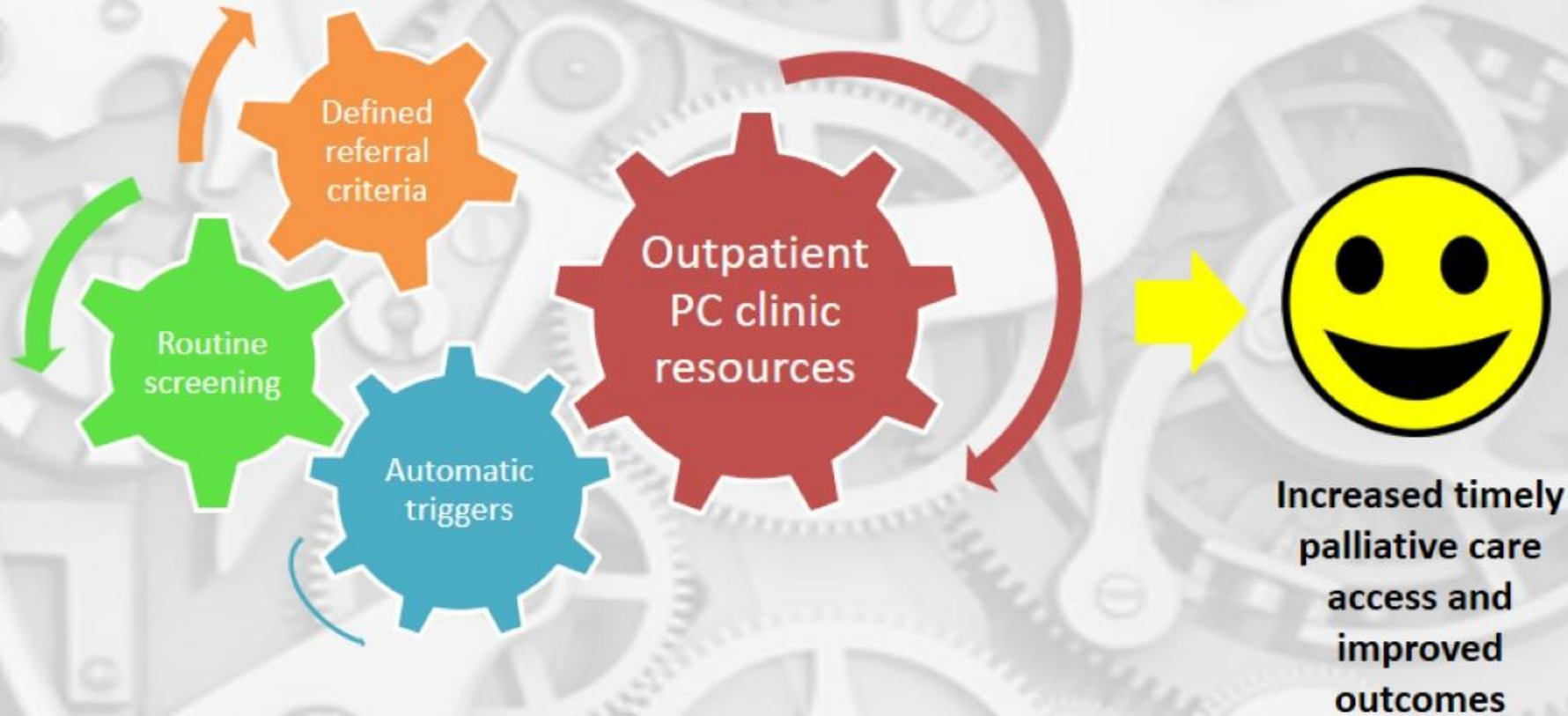
Secondary outcomes

- EQ-5D showed improvement in mobility ($P=0.02$), self-care ($P=0.01$), anxiety/depression ($P=0.01$), pain/discomfort ($P=0.05$), usual activities ($P=0.09$)
- Fewer ER visits at 1 year (34% vs. 41%, $P=0.02$)
- Fewer hospitalized at 1 year (45% vs. 49%, $P=0.08$)
- Chemotherapy longer (8.2 m vs. 6.3 m, $P=0.002$)

Median survival

- PRO: 31.2 months
- Control: 26.0 months
- HR 0.83 (95% 0.70-0.99, $P=0.04$)

Screening-Criteria-Automated triggers-Network (SCAN)



How can **organizations** provide
better supportive care?

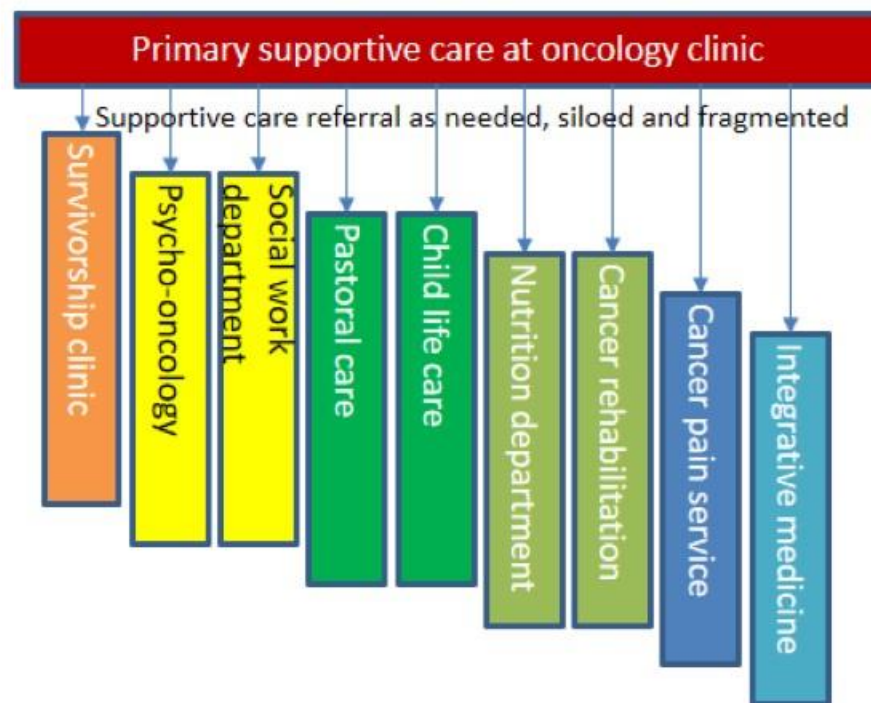
Supportive Care Services

Many Different Departments

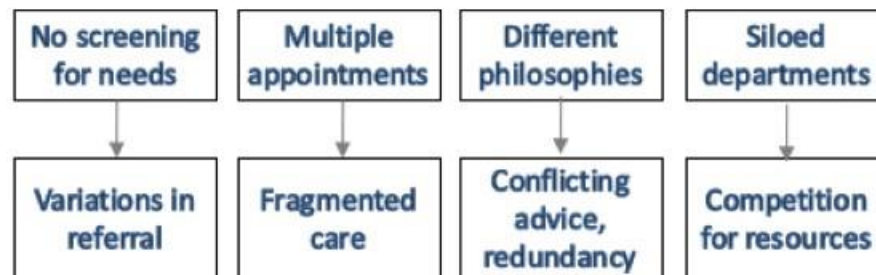
Supportive Care Services	Focus	Disciplines
Cancer treatment support services	Cancer related complications and adverse effects of cancer therapies	Advanced practice providers, physicians, nurses
Integrative medicine	Complementary therapies	Acupuncturists, art therapists, massage therapists, music therapists, yoga therapists, physicians and others
Navigation programs	Information, health system navigation, community resources	Nurses, lay navigators
Ostomy care	Post-operative care	Nurses
Palliative care	Diverse needs of patients with advanced cancer	Advanced practice providers, nurses, pharmacists, physicians, psychologists, social workers
Psycho-oncology services	Psychosocial care	Psychologists, psychiatrists, chaplains, social workers
Specialized symptom clinics		
Cachexia clinic	Anorexia-cachexia	Dieticians, nurses, physicians, psychologists
Cancer pain clinic	Cancer pain	Physicians (pain specialists), nurses, psychologists
Dyspnea clinic	Dyspnea	Physicians (palliative care, pulmonologists), rehab, resp. therapists
Fatigue clinic	Cancer-related fatigue	Nurses, physicians, psychologists, physical therapists
Survivorship clinics	Cancer surveillance and long term toxicities	Advanced practice providers, physicians (oncologists), nurses

Organizational Models

Siloed Approach

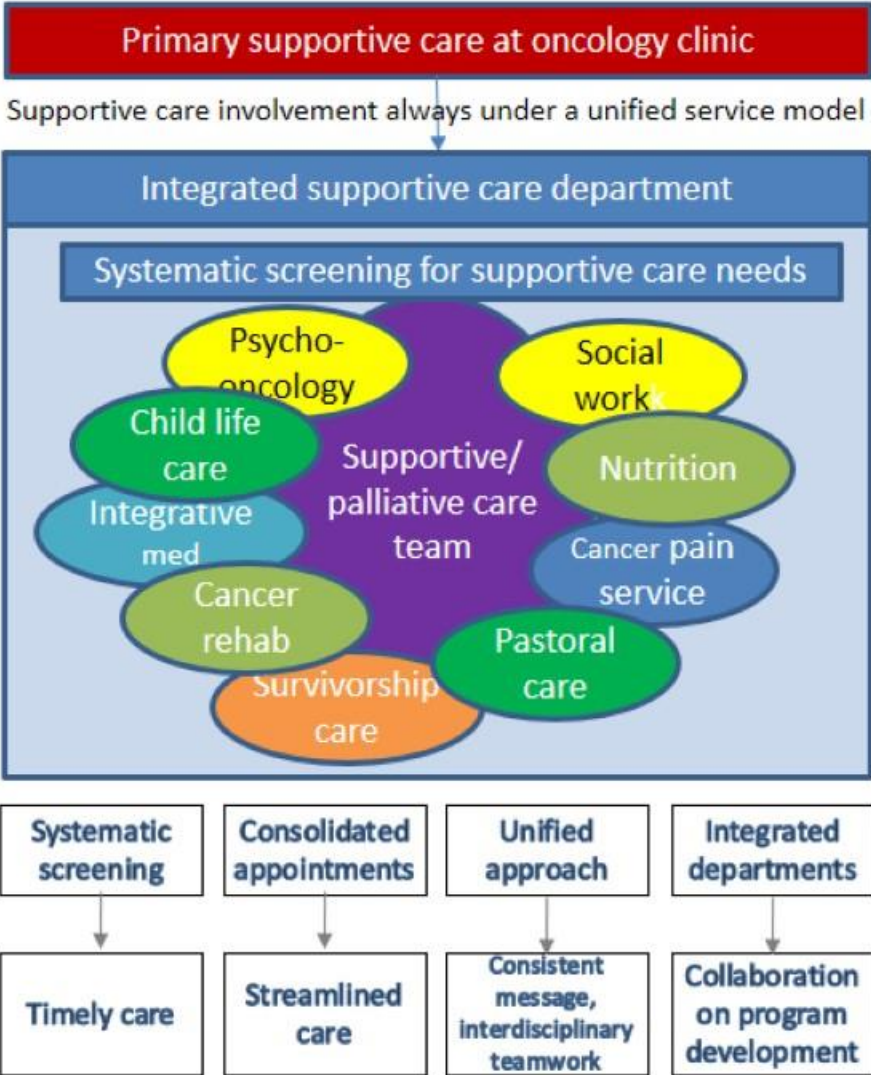


Key Concerns



Organizational Models

Integrated System Approach



Summary

- Patients with cancer have significant supportive care needs
 - Many different supportive care services evolved over time
 - High variability in supportive care = variability in quality of care
- Different models for oncologists to provide supportive care
 - Solo model
 - Congress model
 - Integrated model
- No one model fits all – but the **principles matter**
 - More systematic screening of supportive care needs
 - More referrals/collaborations
 - More integrated organizational structure
- More high-quality research is needed!

Dank U

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