Supportive Care for Patients Living with Advanced Heart Failure (HF)

The Sabah Experience

DR NG WANJUN

PALLIATIVE CARE PHYSICIAN

QUEEN ELIZABETH HOSPITAL, KOTA KINABALU, SABAH

Mr L: 34 year-old IT store worker

- Underlying: tophaceous gouty arthritis, CKD, gastritis
- Non-ischemic dilated cardiomyopathy diagnosed 2012
  - first presented with failure symptoms to Sarawak Heart Centre. CMRI and CT Angiogram: normal coronary artery, severe dilated LV with EF 30%
  - 2014: moved to Sabah. ECHO in 2017: EF 20-35%, moderate to severe global hypokinesia
  - June 2018: ICD implanted
- Jan 2019: admitted for acute decompensation, referred palliative (inotropic dependence), but eventually discharged well

2019 -2021

- Feb 2019 –Sept 2020: well during 3 clinic review, NYHA 1, then defaulted follow up
- Oct 2020 – Apr 2021: 3 hospitalizations for acute decompensation

✓ When to refer specialist palliative care?
✓ What value can palliative care add to standard care?
✓ How to integrate palliative care to standard care model?

CONTENT

- Burden of heart failure
- Prognostication in heart failure
- When to initiate palliative care approach & refer specialist palliative care
- Integrating palliative care
- Case discussion
- Local collaborative work in Sabah

Global burden of heart failure

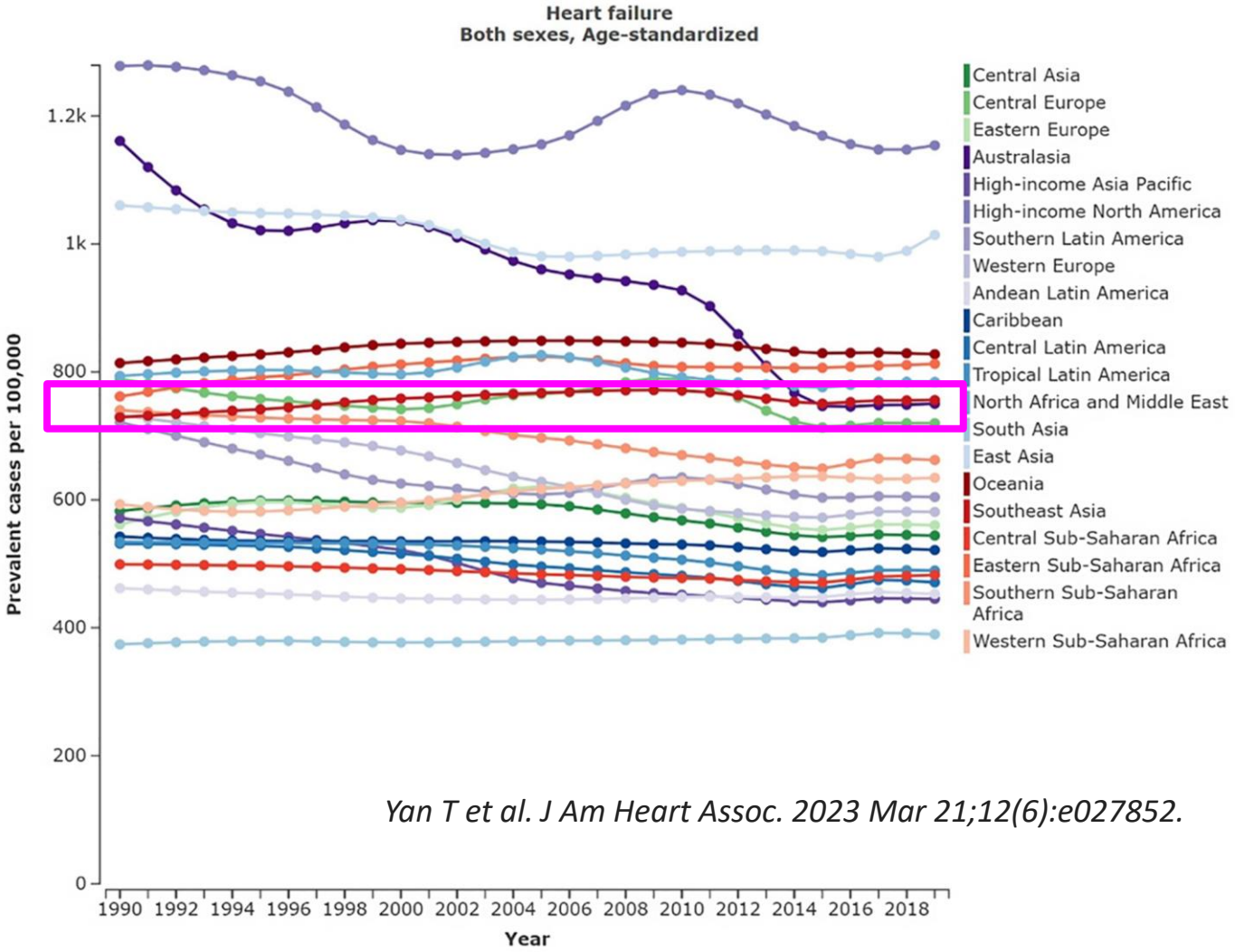
Journal of the American Heart Association
Volume 12, Issue 6, 21 March 2023
https://doi.org/10.1161/JAHA.122.027852

ORIGINAL RESEARCH

Burden, Trends, and Inequalities of Failure Globally, 1990 to 2019: A Se Analysis Based on the Global Burd Disease 2019 Study

Tao Yan, MD *; Shijie Zhu, MD*; Xiujie Yin, MD*; Changming Xie, MD; Miao Zhu, MD ; Fan Weng, MD; Shichao Zhu, MD ; Bitao Xiang, M Gang Liu, MD; Yang Ming, MD; Kai Zhu, MD; Chunsheng Wang, MD ;

- 56.2 million
- 1-2% of adult population



Yan T et al. J Am Heart Assoc. 2023 Mar 21;12(6):e027852.

ESC European Society of Cardiology
Cardiovascular Research (2022) **118**, 3272–3287
https://doi.org/10.1093/cvr/cvac013
INVITED REVIEW

Global burden of heart failure: a comprehensive and updated review of epidemiology

Gianluigi Savarese [1,2†], Peter Moritz Becher[1,3†], Lars H. Lund[1,2], Petar Seferovic[4,5], Giuseppe M.C. Rosano[6], and Andrew J.S. Coats[7*]

Prevalence

Prevalence 1-3% in general adult population

Overall prevalence ↑

Prevalence in HFrEF ↔

Prevalence In HFpEF ↑

Incidence

Incidence 1-20 cases per 1,000 person-years or per 1,000 population

Incidence stable/ declining ↔

Incidence in HFrEF ↓

Incidence in HFpEF ↘

Mortality

Mortality remains high

30-day Mortality	~2-3%
1-year Mortality	~15-30%
3-year Mortality	~30-50%
5-year Mortality	~50-75%

CVD HFreF ↓ Non-CVD HFpeF ↑

Costs

Annual health care costs up to €25,500 per year

Increasing due to major demographic changes (>65 years)

Main cost drivers:
- Directs costs (~70%)
- Non-CVD comorbidities
- Invasive procedures
- Medications/Diagnostics
- Outpatient visits

Aetiology:
- IHD (40%, SEA 60%)
- Hypertension (15%)
- Rheumatic heart disease

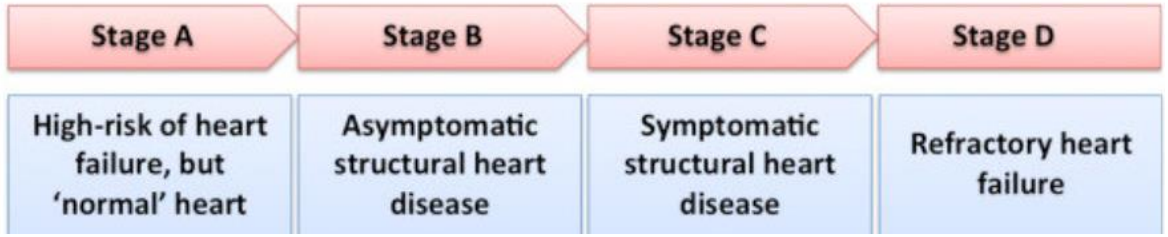
Savarese G, et al. Cardiovasc Res. 2023 Jan 18;118(17):3272-3287.

Prognostication in HF

Classification of HF

- Left ventricular ejection fraction
- Circulatory system: ⬅ vs ➡
- Clinical Presentation:
  - Acute heart failure (Acute HF)
  - Chronic heart failure (Chronic HF)
- Functional: NYHA class, INTERMACS
- Stages of HF

Ejection Fraction Terminology	LVEF
Heart Failure with Reduced Ejection Fraction (HF*r*EF)	≤ 40%
Heart Failure with mildly reduced LVEF (HF*mr*EF)	41 - 49%
Heart Failure with Preserved Ejection Fraction (HF*p*EF)	≥ 50%
Heart Failure with Improved Ejection Fraction (HF*imp*EF)	HF with a baseline LVEF of ≤ 40%, a ≥10-point increase from baseline LVEF following treatment, and a second measurement of LVEF of > 40%.



Malaysia Heart Failure CPG 2023.

Trajectory of HF

Mortality

Mortality remains high

30-day Mortality	~2-3%
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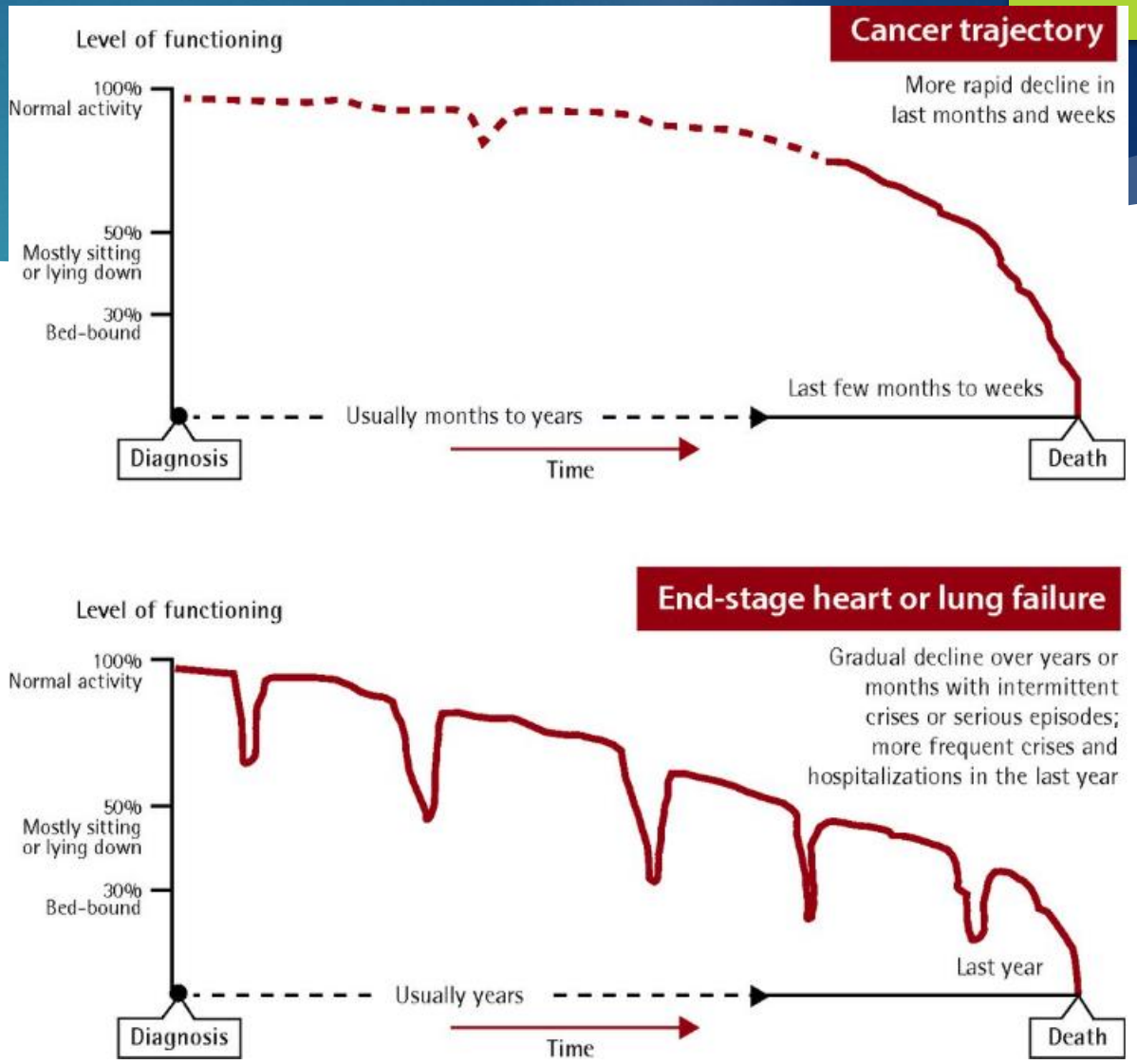
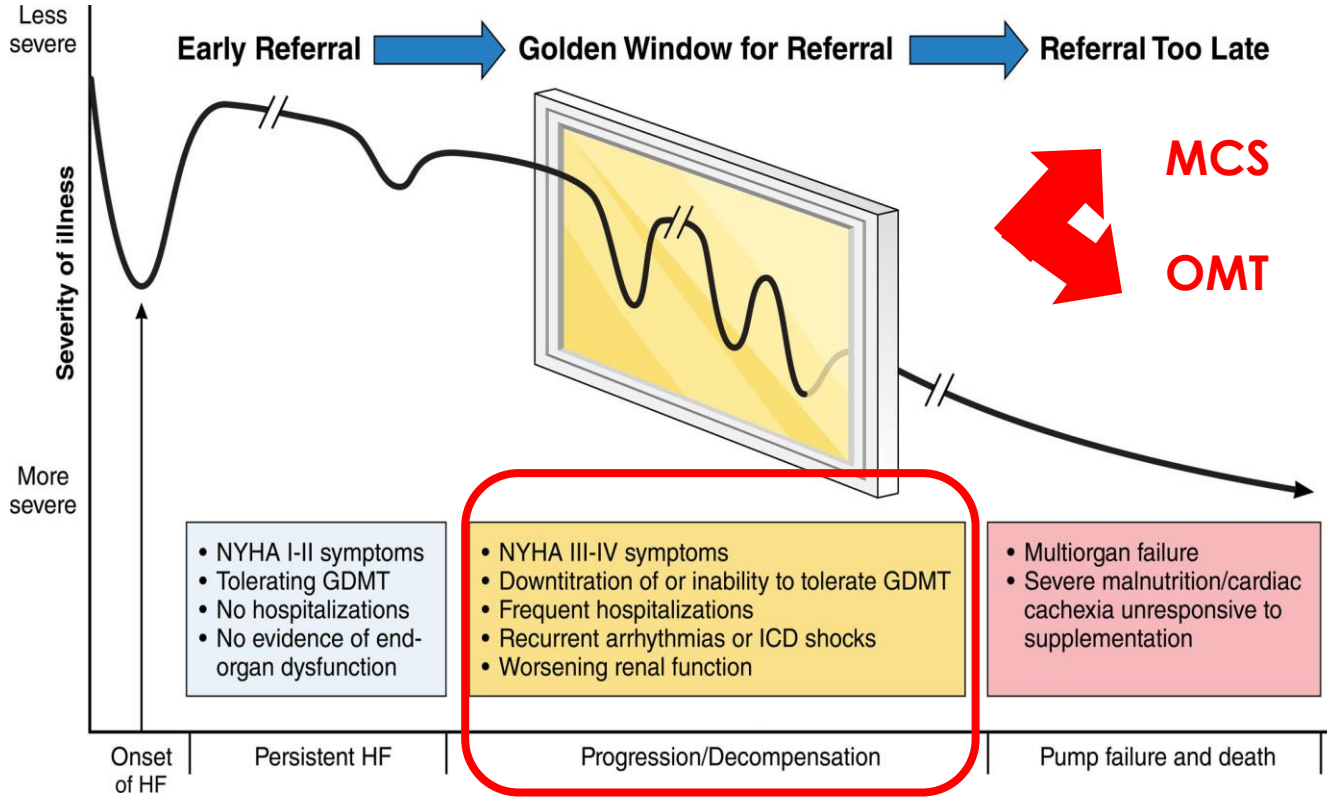
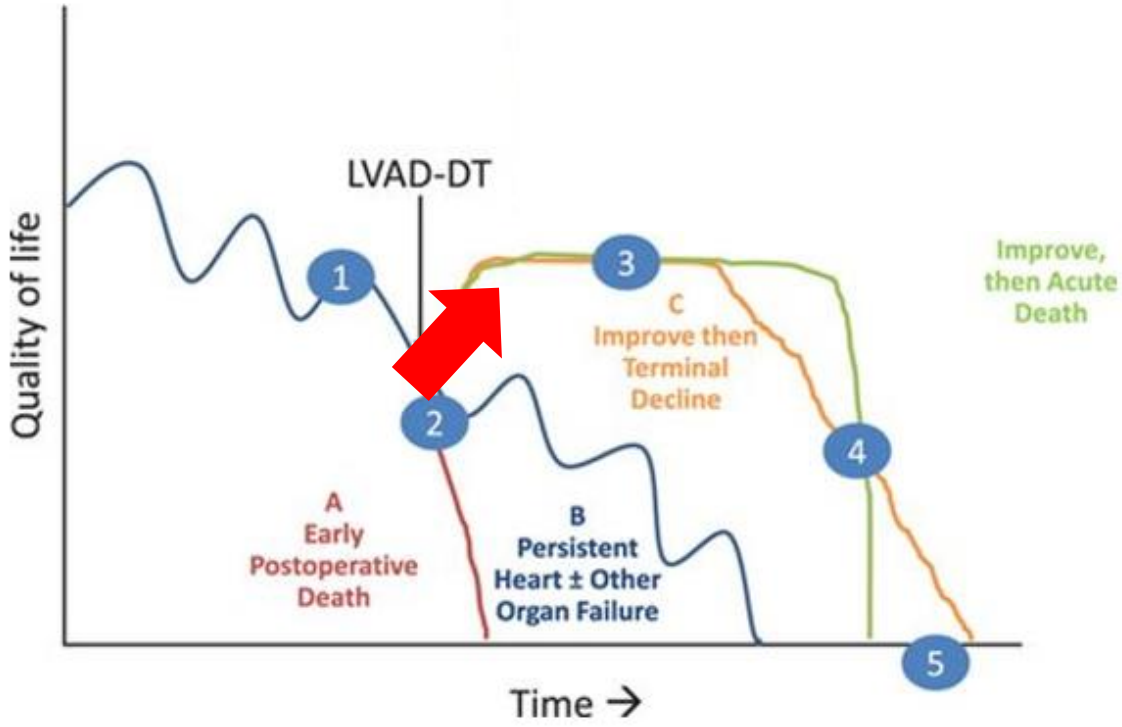


Steinberg L et al. Approach to advanced heart failure at the end of life. Can Fam Physician 2017.

Identifying patients with advanced HF for advanced therapies





MCS= mechanical circulatory support; OMT= optimal medical therapy

Morris AA, et al. Circulation. 2021 Oct 12;144(15):e238-e250.

Prognostic tools

- Cardiac cachexia
- Anaemia
- Urea
- BNP
- Refractory symptoms

Seattle Heart Failure Model (SHFM)
Cardiovascular Medicine Heart Failure Index (CVM-HF)
Heart Failure Survival Score
Meta-Analysis Global Group in Chronic Heart Failure (MAGGIC)
EVEREST Risk Model
EFFECT
ADHERE
ESCAPE Discharge Score
PACE
SHOCKED
Palliative Performance Scale
Frailty Score

Treece J et al. Am J Hosp Palliat Care. 2018 Mar;35(3):514-522.

When to initiate palliative care approach & refer specialist palliative care

Identifying patients with palliative needs

Tool*	IPOS (version 1)	GSF-PIG (6th edition, 2016)	RADPAC (original)	SPICT (April 2019)	NAT:PD-HF (original)	NECPAL (version 3.1, 2017)
Patient identification		✓	✓	✓		✓
Needs identification	✓				✓	
Needs assessment/ decision aids		✓	✓	✓	✓	✓
Needs measurement	✓					

*This classification should not be considered rigid as there can be some overlap in these applications

Ament SM et al. Palliat Med. 2021 Jan;35(1):45-58.

THE UNIVERSITY of EDINBURGH

Supportive and Palliative Care Indicators Tool (SPICT™)

NHS SCOTLAND

The SPICT™ is used to help identify people whose health is deteriorating. Assess them for unmet supportive and palliative care needs. Plan care.

Look for any general indicators of poor or deteriorating health.

- Unplanned hospital admission(s).
- Performance status is poor or deteriorating, with limited reversibility. (eg. The person stays in bed or in a chair for more than half the day.)
- Depends on others for care due to increasing physical and/or mental health problems.
- The person's carer needs more help and support.
- Progressive weight loss; remains underweight; low muscle mass.
- Persistent symptoms despite optimal treatment of underlying condition(s).
- The person (or family) asks for palliative care; chooses to reduce, stop or not have treatment; or wishes to focus on quality of life.

Heart/ vascular disease

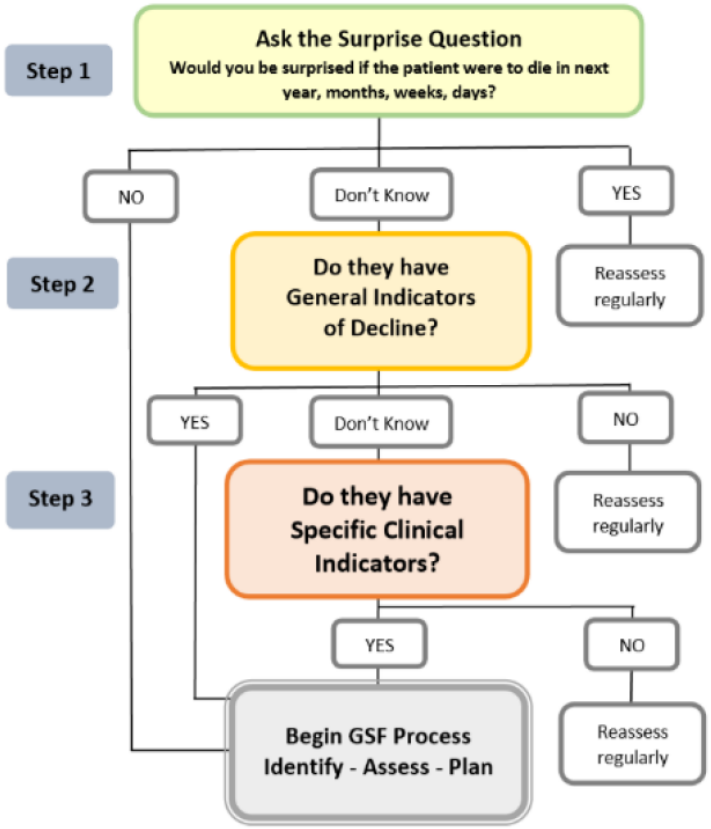
Heart failure or extensive, untreatable coronary artery disease; with breathlessness or chest pain at rest or on minimal effort.

Severe, inoperable peripheral vascular disease.

The Gold Standards Framework
Proactive Identification Guidance (PIG)

The National GSF Centre's guidance for clinicians to support earlier identification of patients nearing the end of life, leading to improved proactive person-centred care.

GSF PIG 7th Edition June 2022 Keri Thomas, Max Watson (HUK), Julie Armstrong Wilson and the GSF team



STEP 2: General indicators of decline and increasing needs

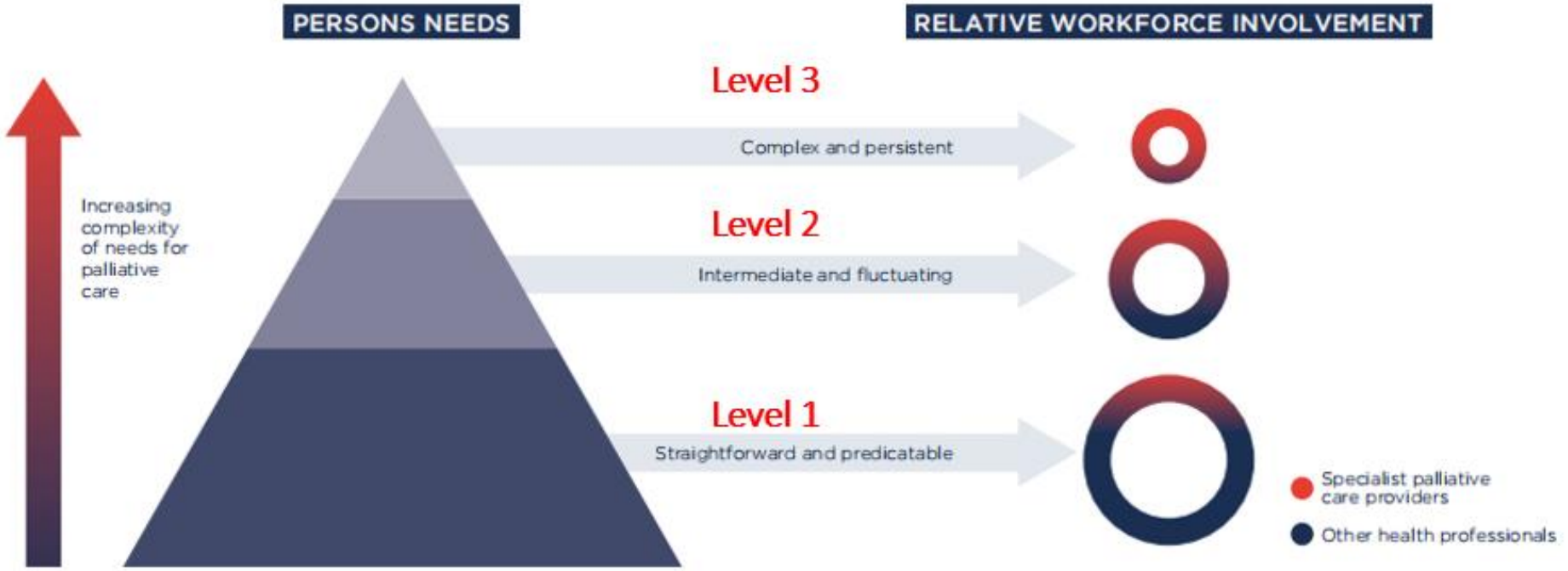
- General physical decline, increasing dependence and need for support
- Repeated unplanned hospital admissions or acute crises at home
- Advanced disease - unstable, deteriorating, complex symptom burden
- Presence of signi
- Decreasing activi
  Barthel or Karnof
  in bed or chair 5(
  daily living
- Decreasing respo
- Patient choice fo
- Progressive weig
- Sentinel Event e.
  to nursing home,
- Serum albumin <

2. ORGAN FAILURE

HEART DISEASE

- Advanced heart failure - CHF NYHA Stage 3 or 4 with symptoms despite optimal HF therapy – shortness of breath at rest/on minimal exertion
- Repeated admissions with heart failure – 3 admissions in 6 months or a single admission aged over 75 (50% 1yr mortality)
- Heart failure patients with reduced ejection fraction (HFrEF) have a poorer prognosis than those with preserved ejection fraction (HFpEF)
- Severe untreatable coronary artery or peripheral vascular disease
- Difficult ongoing symptoms despite optimal tolerated therapy
- Unpredictability but other indicators include age, low EF, ischaemic heart disease/arrythmias multi-morbidities including diabetes, obesity depression, hyponatraemia, high BP, declining renal function, anaemia

Level of palliative care needs



Australian Palliative Care Service Development Guidelines, 2018

Key domains of palliative care needs

- Advance care planning for goals & ceiling of care
- Crisis planning
- Device deactivation

- GDMT & comorbid mx
- Refractory symptoms
- Justification for opioid
- Terminal symptoms

- Emergency contact
- Telemedicine option
- ↓ hospital TCA burden
- Timing to engage hospice
- PPOC & PPOD

- Screening for anxiety & depression
- Request for hastened death/ futile Rx
- Caregiver capacity & coping

Referral criteria to specialist palliative care

Prognosis-based criteria

- Surprise question
- Frequent hospitalization
- Functional decline
- Medical complications e.g. cardiorenal syndrome, frequent ICD shocks
- Intolerability of GDMT

Need-based criteria

- Complex and refractory symptoms despite optimal medical therapy
- Complex family dynamics and psycho-existential distress
- Decision support – uncertainty, discordance
- Terminal care

Grądalski T. Pol Arch Intern Med. 2022 Mar 30;132(3):16223.
Chang YK et al. Circ Heart Fail. 2020 Sep;13(9):e006881.

Integrating palliative care to standard HF care

Chronic Care	Crisis Care	Terminal Care

ACC/AHA (2022)	ESC (2021)	JCS/JHFS (2021)
For all patients with HF, palliative and supportive care should be provided to improve QOL and relieve suffering	Communication about the disease trajectory and anticipatory planning should start when a patient is diagnosed with advanced HF	Perform advanced care planning, which is the process of dialogue about medical treatment with patients and families in advance before the patient's decision-making ability fails
Best care includes high-quality communication, conveyance of prognosis, clarifying goals of care, shared decision-making, symptom management, and caregiver support	Proactive decisions and advanced planning with regard to palliative and end-of-life care discussions should be documented, regularly reviewed, and routinely communicated to all those involved in the patient's care.	
For patients with HF being considered for, or treated with, life-extending therapies, the option for discontinuation should be anticipated and discussed through the continuum of care, including at the time of initiation, and reassessed with changing medical conditions and shifting goals of care	It is recommended that patients with HF be enrolled in a multidisciplinary care management program to reduce the risk of HF hospitalization and mortality	Continue treatment for heart failure and complications and aim for palliation of coexisting symptoms

Abbreviations: ACC = American College of Cardiology Foundation; AHA = American Heart Association; COR = Class of recommendation; EOL = End of life; ESC = European Society of Cardiology; HFSA = Heart Failure Society of America; JCS = Japanese Circulation Society; JHFS = Japanese Heart Failure Society; LOE = Level of evidence; QOL = Quality of life.

- Integration is good, but how?

Sustainable integrated care model

- **Need-based referral criteria** to specialist palliative care preferred over prognosis-based criteria
- **Shared-care model** - PC should be provided alongside guideline directed medical therapy (GDMT)
- **3C** - **C**ontinuous interdisciplinary **C**ollaboration/cross-training and **C**ommunication

Ponikowski P et al. Eur Heart J. 2016 Jul 14;37(27):2129-2200.
Gaertner J et al. BMJ. 2017 Jul 4;357:j2925.
Gelfman LP et al. J Palliat Med. 2017 Jun;20(6):592-603.

Key interventions of palliative care

Chronic care

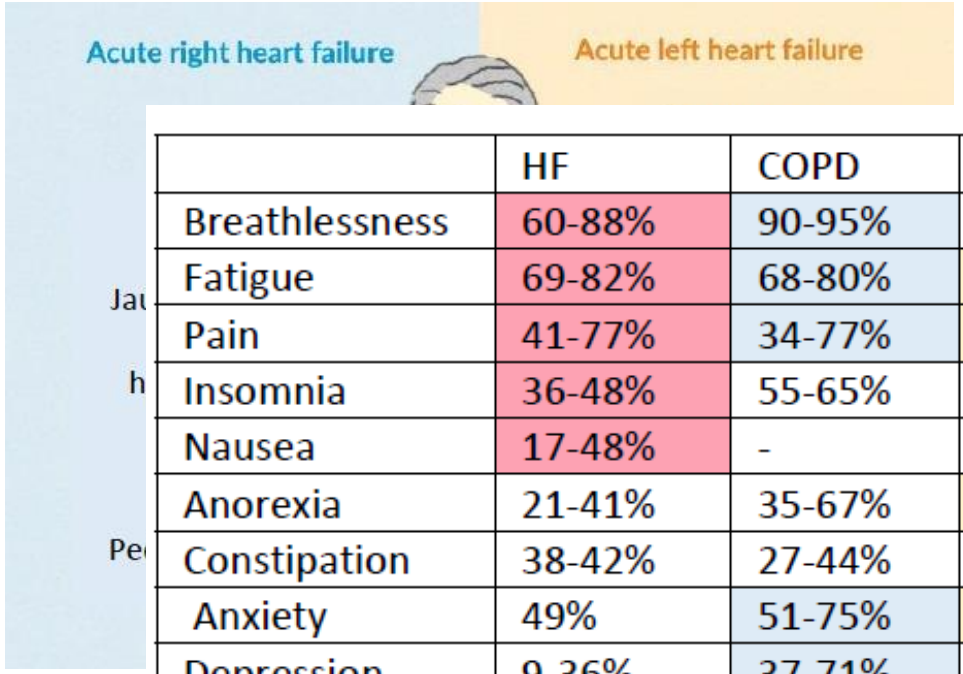
- Shared care with primary team

Chronic phase: Outpatient Clinic Choice of models depends on disease trajectory, symptom burden, patient preference		
Regular HF clinic, palliative consult PRN	Concurrent HF and palliative clinic	Regular palliative clinic, cardiology consult PRN

- **Optimization of GDMT** – ACE-I/ ARNI, BB, MRA, SGLT2-I (regular blood taking)
- Screen for symptoms for decompensation: fluid status
- Monitor progression of disease: functional, nutritional
- Managing CVS risk factors and co-morbitiies

- **ACP discussion** & **psychosocial support**
- **Care coordination** – hospice/ domiciliary service

Common symptoms

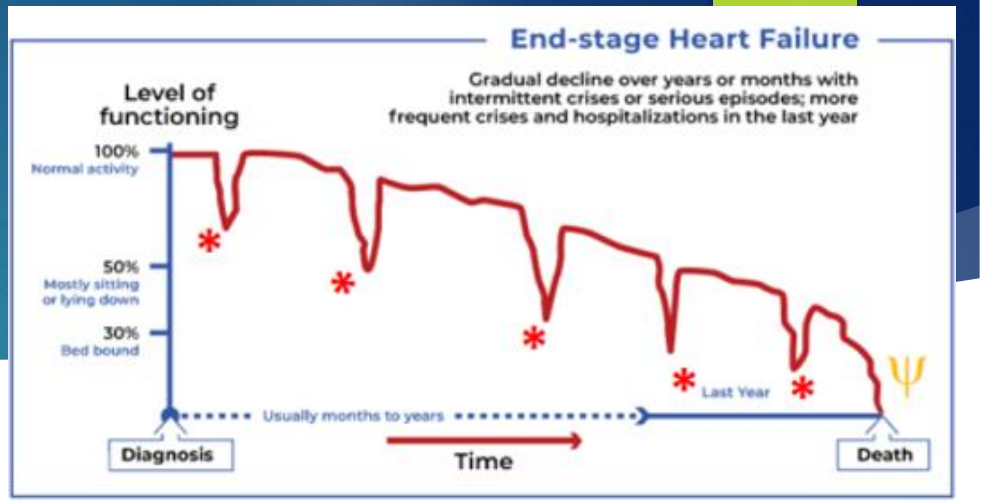


	HF	COPD	Cancer
Breathlessness	60-88%	90-95%	10-70%
Fatigue	69-82%	68-80%	32-90%
Pain	41-77%	34-77%	63-80%
Insomnia	36-48%	55-65%	9-69%
Nausea	17-48%	-	6-68%
Anorexia	21-41%	35-67%	30-92%
Constipation	38-42%	27-44%	23-65%
Anxiety	49%	51-75%	13-79%
Depression	9-36%	37-71%	3-77%
Confusion	18-32%	18-33%	6-93%

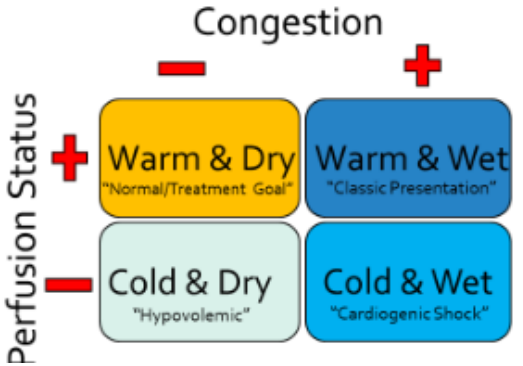
- Identify and treat reversible causes
- Role of opioid – NOT 1st line medication
  - refractory dyspnoea/ angina
- Choice of palliative medication
  - Cardiotoxicity, renal impairment, pill burden

Solano JP et al. J Pain Symptom Manage. 2006 Jan;31(1):58-69.

Crisis care



- Reversibility of cause, refractoriness of symptoms
- Ceiling of care
- Disposition

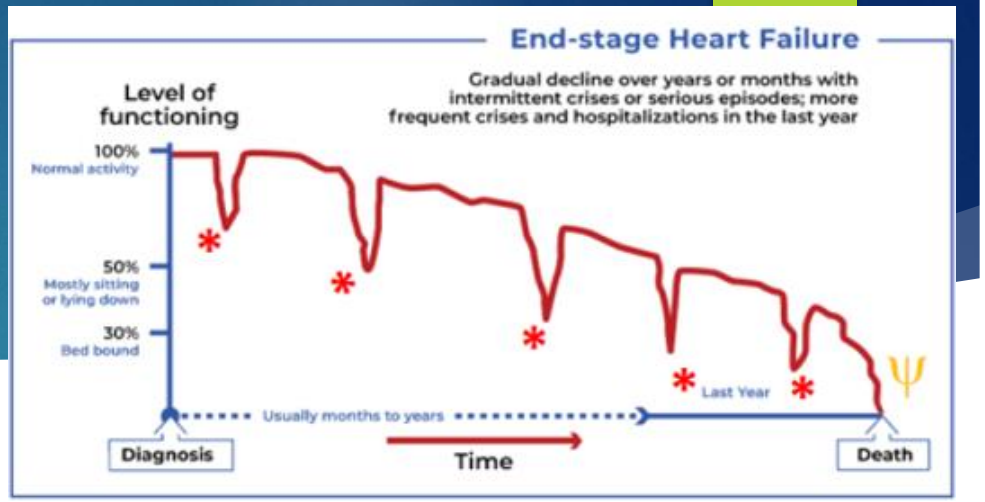


***Crisis phase: Emergency visit/ palliative walk-in clinic♣**

Disposition depends on symptom severity, ceiling of care, bed availability, patient preference

Cardio rehabilitation ward	Medical ward	Palliative ward

Terminal care



- Terminal symptoms
- Device deactivation, deprescribing
- Preferred place of care & dying – feasibility

ψTerminal phase (prognosis of hours to days): Preferred place of dying depends on symptom burden, caregiver capacity, patient preference, hospice coverage area and capacity	
Home (supported by community hospice care)	Hospital

- Screen for risk of complicated grief

- Compassionate extubation
- Terminal discharge

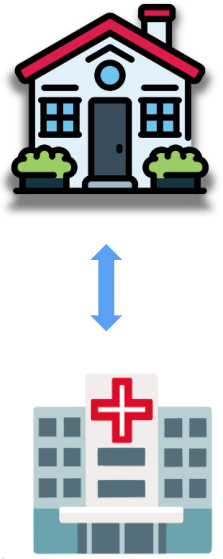
Roles of domiciliary/ hospice care

Challenges

- Medical complexity
- Intensity of care during crisis
- Greater unpredictability of disease trajectory

Roles

- Comprehensive screening for palliative care needs
- Review ACP
- Care coordination
- First liner during crisis – advise for self titration of diuretics for mild symptoms



Cross SH et al. Card Fail Rev. 2019 May 24;5(2):93-98.
Jordan L et al. Am J Hosp Palliat Care. 2020 Nov;37(11):925-935.

Hill L et al. Eur J Heart Fail. 2020 Dec;22(12):2327-2339.
Sobanski PZ et al. Cardiovasc Res. 2020 Jan 1;116(1):12-27.

Patient with advanced chronic heart failure (>3/12 since diagnosis)

yes

Any **red flag** "general indicator of decline", or complex psychosocial issue prohibiting OMT? (= high risk of MACE +/- increasing care needs)
- Persistent symptoms refractory to OMT
- 2 or more unscheduled hospitalizations in the past 6 months due to decompensated HF
- Functional decline due to HF (NYHA III-IV)
- Medical complications eg, cardio-renal/ hepatic syndrome

yes

Monthly MDT HF conference

Supportive care

Advanced therapies

Palliative consult PRN to facilitate decision making/ ACP

Primary palliative care approach by cardiology team
- ACP discussion (including patient's readiness to engage specialist palliative care)
- Psychosocial assessment

functional decline, ↑ symptoms, or change in goals of care

MDT consensus on
- Level of **specialist palliative care** team involvement
- Ceiling of care +/- device deactivation
- Place of care duing crisis phase

Integration of **specialist palliative care**
- Symptom control
- Assist in decision making, care planning
- Psychosocial support
- Care coordination, hospice engagement

Chronic phase: Outpatient Clinic
Choice of models depends on disease trajectory, symptom burden, patient preference

Regular HF clinic, palliative consult PRN	Concurrent HF and palliative clinic	Regular palliative clinic, cardiology consult PRN

***Crisis phase: Emergency visit/ palliative walk-in clinic♣**
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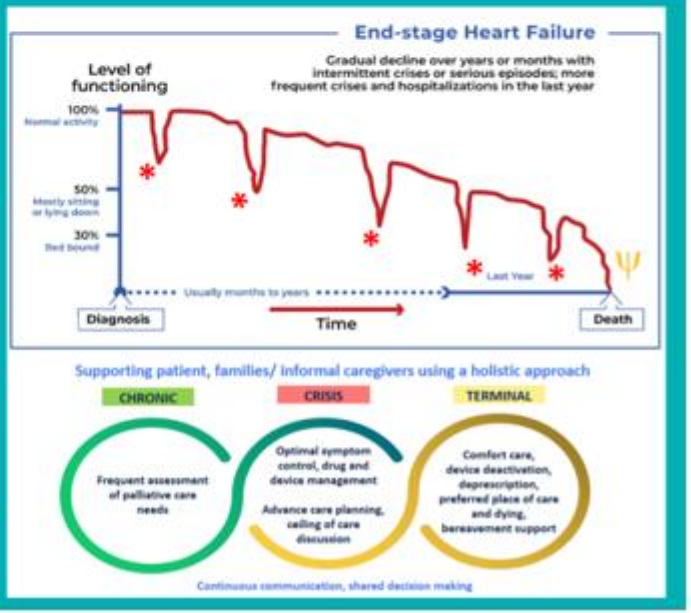


ACP=advance care planning; MACE=major adverse cardiovacular event; MDT=multidisciplinary team; OMT=optimal medical therapy

Back to the case…

Mr L: 34 year-old IT store worker

- Underlying: tophaceous gouty arthritis, CKD, gastritis
- HFrEF secondary to non-ischemic dilated cardiomyopathy diagnosed 2012, ICD implanted 2018
- First acute decompensation Jan 2019 (inotropic dependence)
- Oct 2020 – Apr 2021: 3 hospitalizations for acute decompensation

Referral criteria to specialist palliative care

Prognosis-based criteria

- ✓ Surprise question
- ✓ Frequent hospitalization
- Functional decline
- ✓ Medical complications e.g. cardiorenal syndrome, frequent ICD shocks
- Intolerability of GDMT

Need-based criteria

- Complex and refractory symptoms despite optimal medical therapy
- ✓ Complex family dynamics and psycho-existential distress
- Decision support – uncertainty, discordance
- Terminal care

Grądalski T. Pol Arch Intern Med. 2022 Mar 30;132(3):16223.
Chang YK et al. Circ Heart Fail. 2020 Sep;13(9):e006881.

Chronic care

- Shared care with primary team

- **Optimization of GDMT** – ACE-I/ ARNI, BB, MRA, SGLT2-I
- Screen for symptoms for decompensation & disease progression: fluid status, body weight
- Managing CVS risk factors and co-morbidities
- **Psychosocial support & ACP discussion**

Chronic care - psychosocial history

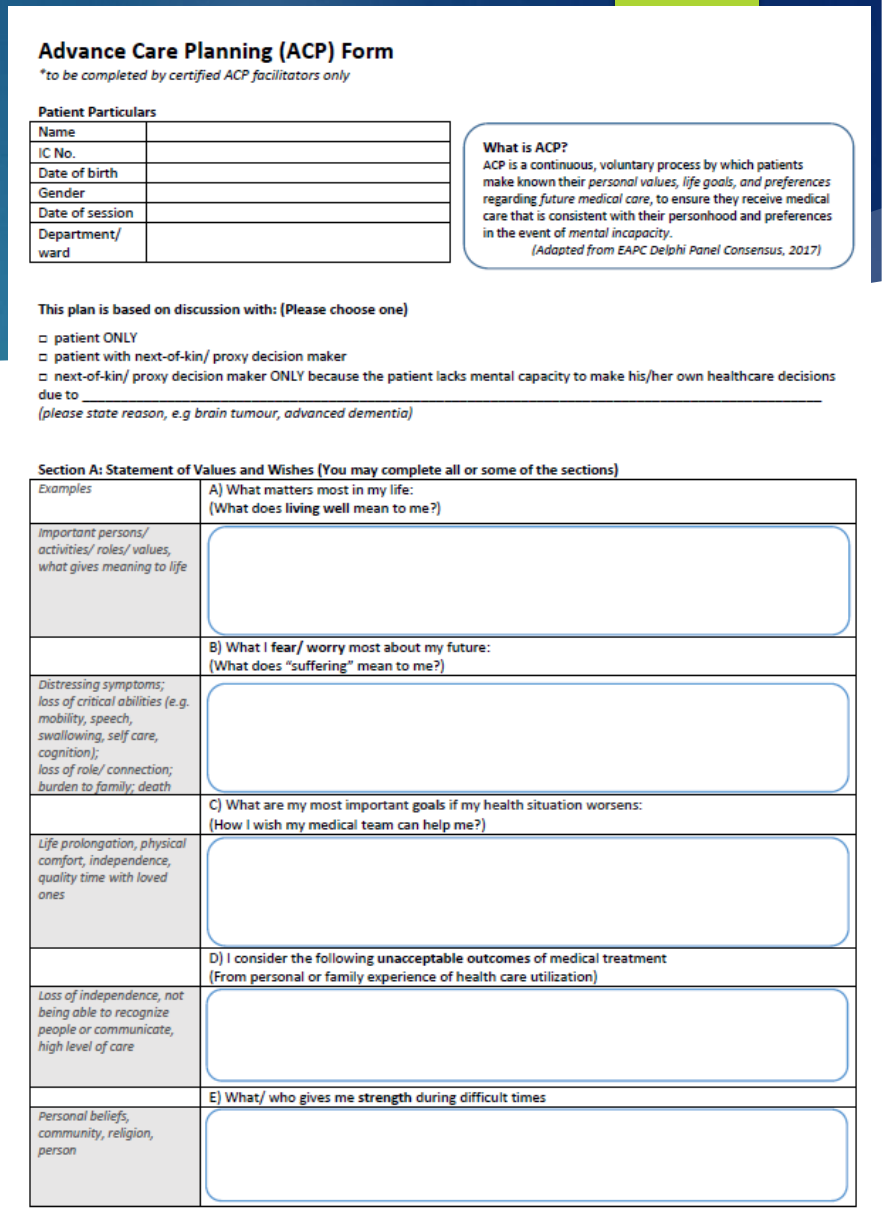
- Divorcee with a young daughter of 4 years old who is now under custody of ex wife -> misses daughter but not allowed to visit her
- Has a partner who is working full time and lives with her parents - **emotionally very attached** to partner → **support partner in understanding & anticipatory grief**
- Problematic youth, estranged from family in Sarawak - **ambivalent relationship → facilitate reconciliation**
- Renting a house with another men, on PERKESO allowance RM 900/month
- Initially still works part time at IT store, but eventually stopped when housebound -> strong sense of **demoralization & loneliness -> volunteer home visit, online support**

Chronic care - spiritual distress

- Converted to Muslim after first marriage but not practicing – **loss of identity**
- In **bargaining** phase of grief – asked for **hastened death** during bad days, but expressed hope to have more years with partner
- Grieving the **loss** of job, marriage, child custody, mobility and relationship - – felt that partner is "better off with another man" as there is no future in their relationship, but unable to let go

Advance care planning

- Values **dignity** – cannot accept himself requiring assistance for personal hygiene
- Wishes **not to become a burden** to his partner
- Ok with time limited trial of treatment for acute decompensation, not keen for painful shock from ICD
  - Agreed for elective **ICD deactivation**
- Understood futility of CPR



Advance Care Planning (ACP) Form

**to be completed by certified ACP facilitators only*

Patient Particulars

Name	
IC No.	
Date of birth	
Gender	
Date of session	
Department/ ward	

What is ACP?
ACP is a continuous, voluntary process by which patients make known their *personal values, life goals, and preferences* regarding *future medical care*, to ensure they receive medical care that is consistent with their personhood and preferences in the event of *mental incapacity*.
(Adapted from EAPC Delphi Panel Consensus, 2017)

This plan is based on discussion with: (Please choose one)

□ patient ONLY
□ patient with next-of-kin/ proxy decision maker
□ next-of-kin/ proxy decision maker ONLY because the patient lacks mental capacity to make his/her own healthcare decisions due to _____
(please state reason, e.g brain tumour, advanced dementia)

Section A: Statement of Values and Wishes (You may complete all or some of the sections)

Examples	A) What matters most in my life: (What does **living well** mean to me?)
Important persons/ activities/ roles/ values, what gives meaning to life	
	B) What I **fear/ worry** most about my future: (What does "suffering" mean to me?)
Distressing symptoms; loss of critical abilities (e.g. mobility, speech, swallowing, self care, cognition); loss of role/ connection; burden to family; death	
	C) What are my most important **goals** if my health situation worsens: (How I wish my medical team can help me?)
Life prolongation, physical comfort, independence, quality time with loved ones	
	D) I consider the following **unacceptable outcomes** of medical treatment (From personal or family experience of health care utilization)
Loss of independence, not being able to recognize people or communicate, high level of care	
	E) What/ who gives me **strength** during difficult times
Personal beliefs, community, religion, person	

Disease trajectory

Before 2018	2018				2019				2020				2021			
	Jan – Mac	Apr – June	Jul – Sept	Oct – Dec	Jan – Mac	Apr – June	Jul – Sept	Oct – Dec	Jan – Mac	Apr – June	Jul – Sept	Oct – Dec	Jan – Mac	Apr – June	Jul – Sept	Oct – Dec

	Jan – Mac	Apr – June	Jul – Sept	Oct – Dec	Jan – Mac	Apr – June	Jul – Sept	Oct – Dec	Jan – Mac	Apr – June	Jul – Sept	Oct – Dec	Jan – Mac	Apr – June	Jul – Sept	Oct – Dec

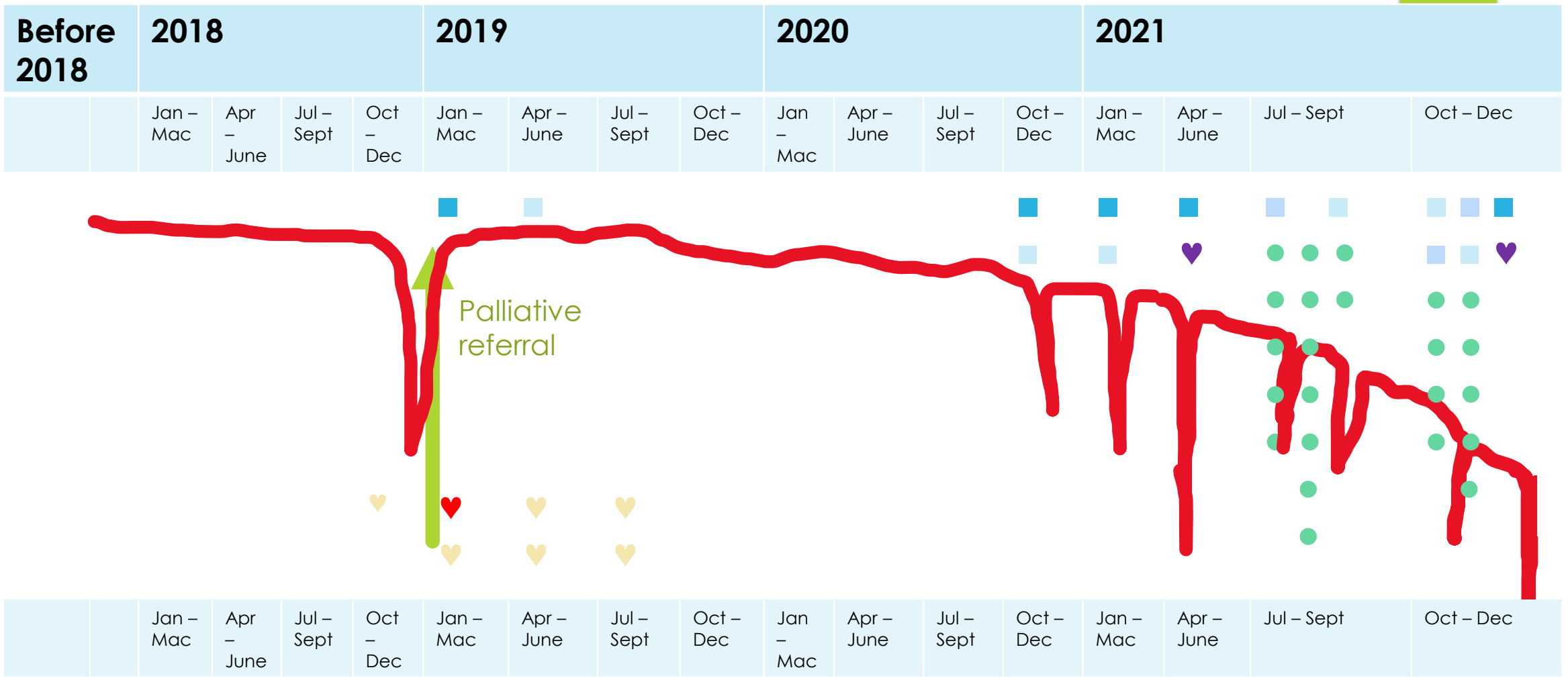
Before 2018	2018	2019	2020	2021

♥ Cardio OPD ♥ Cardio inpatient ♥ HF joint conference ■ Palliative OPD ■ Palliative virtual clinic ■ PCU ● Home hospice

Crisis care

- Right sided failure symptoms, BW ↑ 8-10kg within 2-3 weeks – refractory to oral frusemide → **CSCI frusemide 120-160mg/24h + T metolazone**
- Gastritis symptoms, gouty flare
- Disposition: COVID era: home care → **daily hospice nurse visit to titrate diuretics**

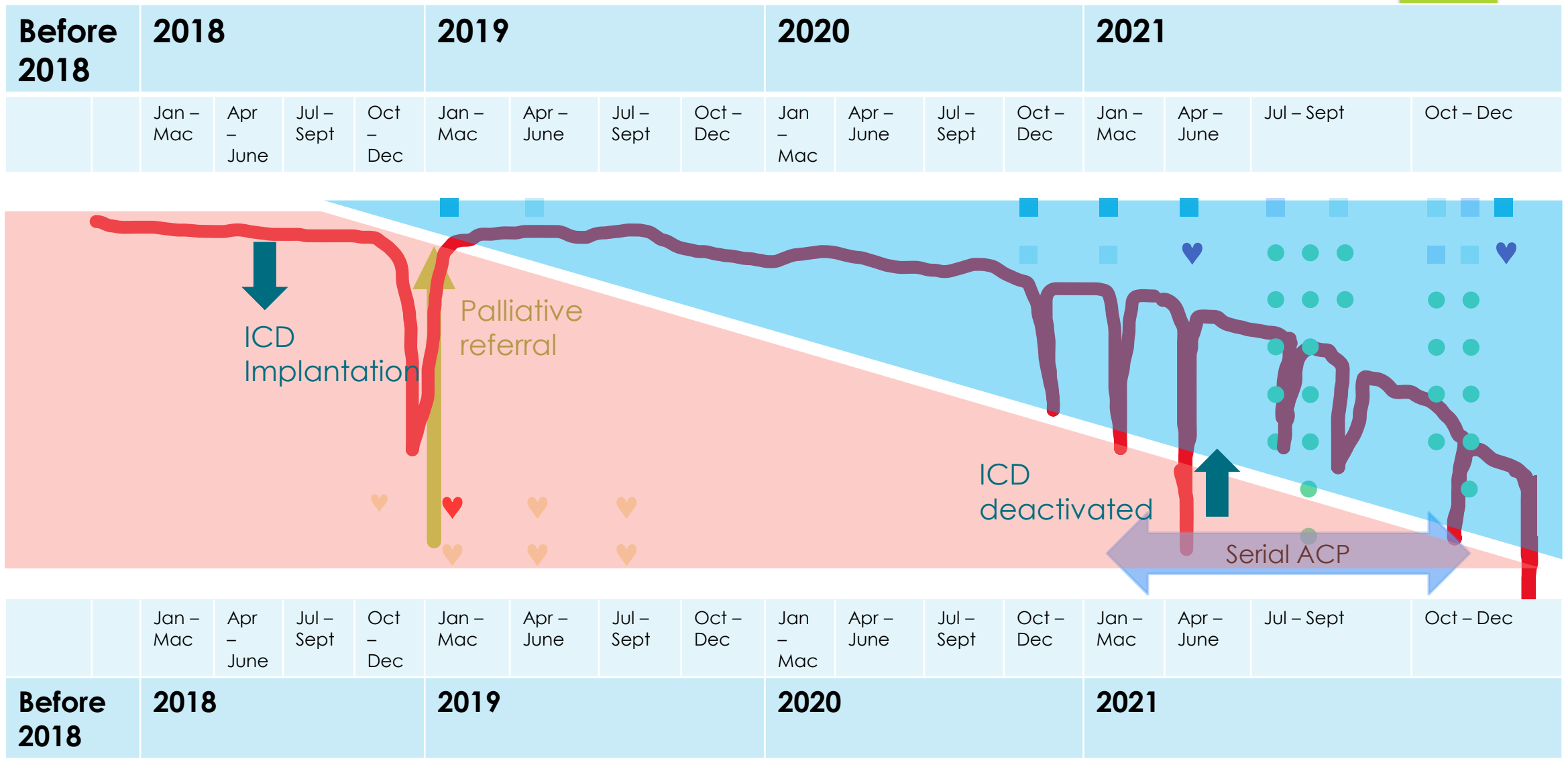
Acute decompensations



Terminal care

- Gradual functional decline & cardiac cachexia during last 3 months
- **Preferred place of dying: hospital**
- Terminal symptoms: mixed delirium → **antipsychotic**
- Father flew in from Kuching to visit him during final days

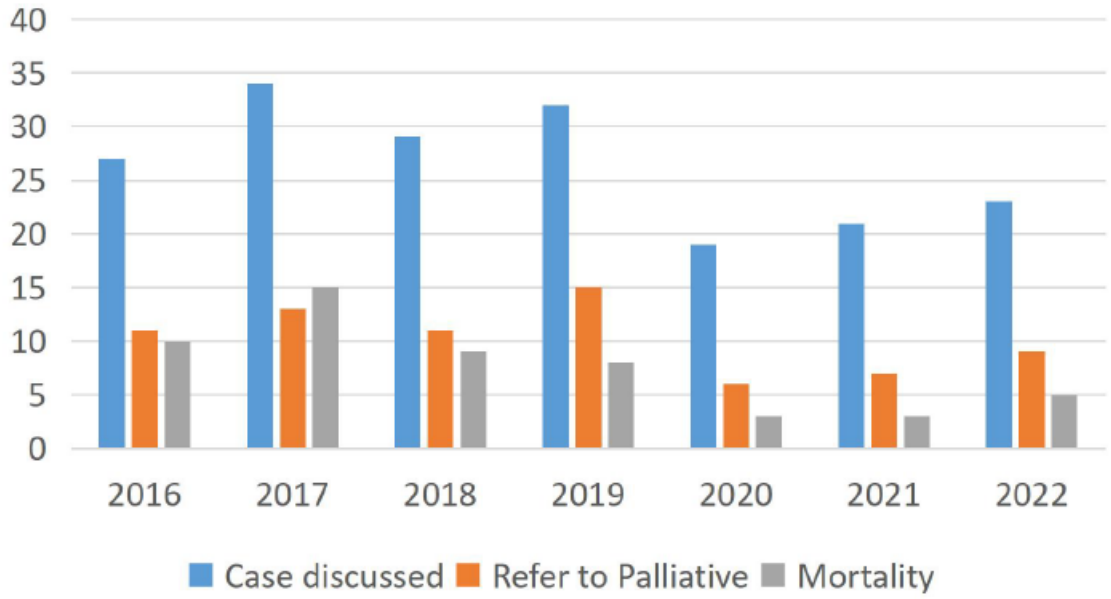
Integrated model



Local HF palliative care collaboration

Local collaborative work

- Collaboration started year 2015
- 2016 - 1st edition of local Guideline for Palliative Care of Advanced HF
- Monthly HF conference to discuss cases
- Whatsapp group chat to communicate/ update on cases under shared care



SABAH HEART CENTRE
QUEEN ELIZABETH HOSPITAL II
DEPARTMENT OF CARDIOLOGY

Guidelines for Palliative Care of End- stage/ Advanced Heart Failure

Operational policy for symptom control

Referral for multidisciplinary care: palliative care & primary care.

Prepared on April 2016

Reviewed on October 2016

Supported by

Consultant Cardiologist, Cardiologist Department, Hospital Queen Elizabeth II	Honorary Consultant, Palliative Care Unit, Hospital Queen Elizabeth
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What to do when a death occurs at home?

Useful contacts

Appendix 6.1

Advance Care Planning (ACP) Form

**to be completed by certified ACP facilitators only*

Patient Particulars

Name	
IC No.	
Date of birth	
Gender	
Date of sessio	
Department/ ward	

What is ACP?
ACP is a continuous, voluntary process by which patients

TD HQE PCU Ed 1 (Sept 21)

This plan is ba
- patient ONI
- patient with
- next-of-kin

due to _____
(please state

Section A: Sta

Examples	
Important pers activities/ roles what gives mea	
Distressing sym loss of critical a mobility, speec swallowing, sel cognition); loss of role/ cor burden to fami	
Life prolongati comfort, indepe	

Terminal discharge (TD) Protocol

Developed by Palliative Care Unit, Queen Elizabeth Hospital

What is terminal discharge (TD)?

*A discharge home when patients are critically or terminally ill and likely to pass away **within short hours or days**. It is a collaborative decision between patient and/or family and the respective medical team.*

Why is this document relevant?

For many, a good death is a death at home. "A TD is seen as celebration of a patient's autonomy, a mark of respect for the patient's personal, familial, cultural, religious values, social values, rituals and norms and a facilitation of meaningful and private time with family".[1] Although many people prefer to die at home, 60-80% died in institutions. Thus it is a good practice to proactively discuss about patient's preferred place of death (PPOD) to facilitate early planning and coordination (especially if an intervention is deemed medically futile).

Practical considerations for TD

The presence of a dedicated caregiver and caregiver coping skills are important factors to enable a home death.[2] Clinical feasibility of TD also needs to be discussed during collaborative decision making. Ill prepared TD can be overwhelming for both ward staff and families, leading to complex grief later.[3] Considerations for TD include the following:

1	Can the symptoms be managed at home?	TD may be challenging without community support if patient ● Has high symptom burden requiring continuous medication titration ● Shows fluctuating clinical course

The Sabah Handbook of Supportive Care in Advanced Heart Failure 2nd Edition

Jointly developed by
Sabah Heart Centre, Queen Elizabeth Hospital II
Palliative Care Unit, Queen Elizabeth Hospital
Sabah, Malaysia (February 2024)

Content

Key take home messages

- **Need-based referral criteria** to specialist palliative care preferred over prognosis-based criteria in small PC service
- **Shared-care model** - PC should be provided alongside guideline directed medical therapy
- **3C** - **C**ontinuous interdisciplinary **C**ollaboration/cross-training and **C**ommunication

THANK YOU

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