End-Of-Life Care for Frail Elderly Patients with Multi-morbidity in the Hospital Setting

HA Convention 2017

DR. JAMES LUK

MBBS(HK), MSC(EXPERIMENTAL MEDICINE)(UBC), FRCP(EDIN), FRCP(GLASG), FRCP(IREL), FHKCP, FHKAM(MED)

Consultant, TWGHs Fung Yiu King Hospital / Queen Mary Hospital

Hon. Clinical Associate Professor, HKU

President, The Hong Kong Geriatrics Society

Older people tend to have multiple co-morbidities, and end-of-life (EOL) issues are unavoidable

In TWGHs FYKH – average age of patients >80 and 10 to 15% admitted patients passed away

Enhanced CGAT Service for EOL Care in RCHEs (ECEOL) 安老院舍晚期醫護服務 in HKWC since Oct 2015

- ACP
- DNACPR (non-hospitalized)

Sharing a recent case…..

- 100 year old bed bound non-communicable lady living in a private residential care home for elderly **(RCHE)**
- Advanced dementia as background
- On nasogastric tube feeding
- Stage IV pressure sore at sacrum
- Admitted QMH for decreased GC
- Treated as sepsis (ESBL E Coli in previous urine culture)
- Meropenam IV given
- DNACPR and transferred FYKH

- Just finished course of meropenam
- Developed lowish BP (80/40 mmHg), tachycardia in FYKH
- No fever

- Attended by on-call MO
  - Ordered CBP LRFT CE Blood culture…….
  - Set IV drip for Gelofusine full rate infusion
  - Cardiac monitor
  - Resume Meropenam IV
  - Portable CXR
  - ECG 12 leads

- Failed to set a new IV access by repeated attempts
- Unable to obtain blood for Ix
- Multiple bruises over the body due to previous IV and blood taking
- Edema over the 4 limbs
- She was drowsy, cachexic, malnourished, sacroplenic, bed ridden, contracture of limbs, no response to stimuli (except slightly open eyes)…….

One knew pretty well she was in the last stage of her life (death was imminent)

- Grand-daughter came – crying…..
- Talked to me and wished her to have comfort care, had prepared for the worse…..
- Grandma had voiced out previously to have comfort care……(no written documentation)
- Cried again……thanks doctor for helping her grandmother……..
- Cried again……...
- Other relatives came later, surrounding the patients, all cried……..

Change of management approach:

- Started End-of-Life Clinical Plan (inpatient) (EOL CPi)
- Two doctors endorsed (one of them specialist)
- Stopped all non-essential medications (stopped simvastatin, aspirin, esomeprazole, multivitamin, calcium, iron tablet)
- Stopped futile treatment (withheld meropenam)
- Off Gelofusine (could not have IV access anyway)
- Withheld RT feeding
- Put on subcutaneous drip (hypodermoclysis) ½ ½ solution q12 h

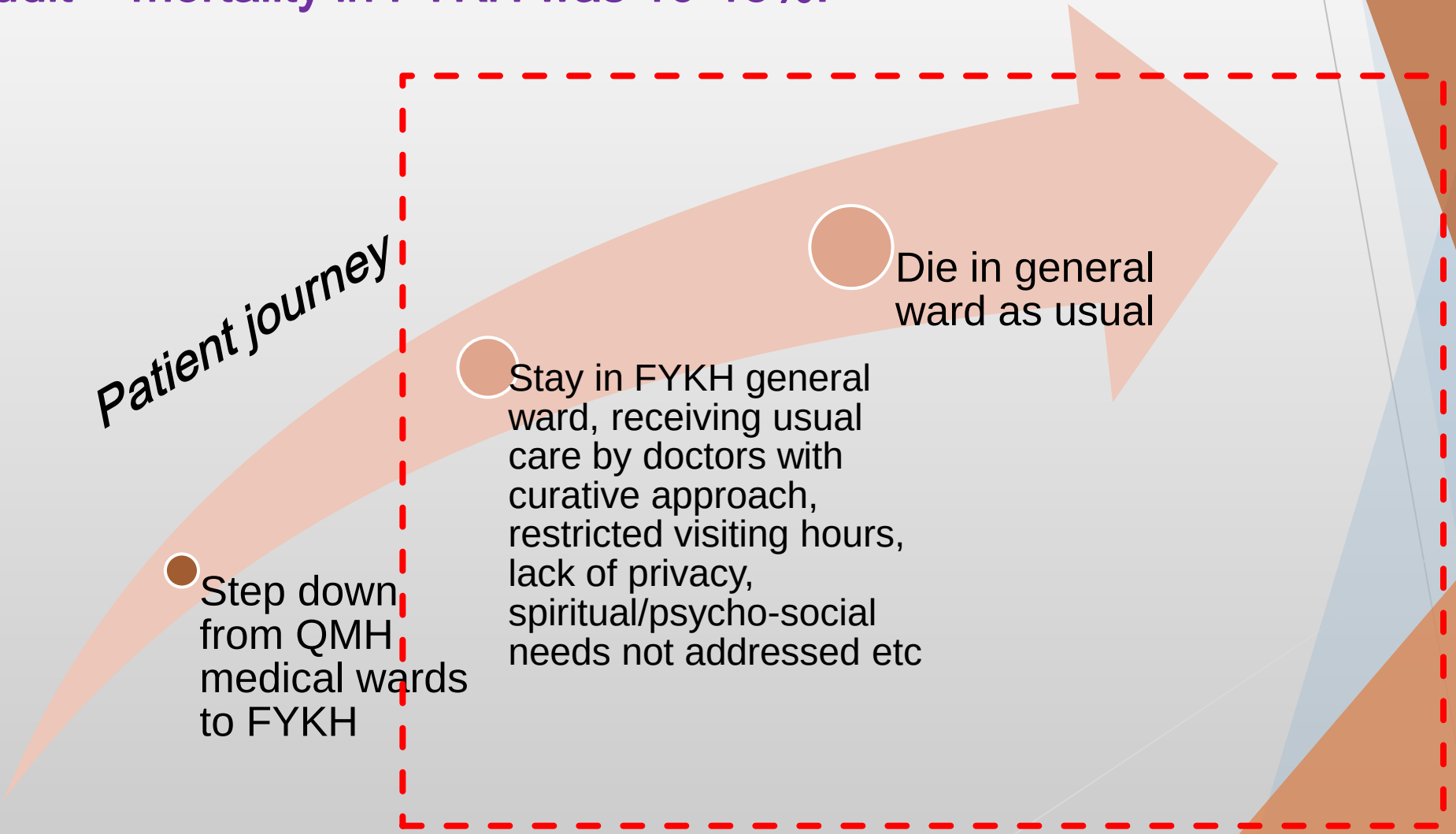
- Off cardiac monitor, off hstix monitoring, off restraint
- Ordered no more blood taking
- Continued DNACPR
- Transferred to EOL ward which allow family members to stay with patients 24 hrs with privacy
- Chaplains arranged to talk to family members
- Patient died 8 hrs later, with 8 relatives accompanying her during the last moment.
- After death – emotion of family addressed, information to the family provided.
- Family thanked for keeping her comfortable in last journey of life…….

Reflection about the management of the patient?

- Drs are taught “what to do”, but not “what not to do” in training.
- End of life care with palliative approach is a form of **ESCALATION,** not a form of “giving up”.
  - **“LESS is MORE”**
- EOL CPi and EOL ward - benefit older patients with imminent death
- Lack of advance care planning

Situation before EOL Clinical Plan in FYKH

Internal audit - mortality in FYKH was 10-15%.



EOL WG to promote EOL in TWGHs FYKH

1. A working group was formed in 2012.
2. Report to COS in Departmental Meeting

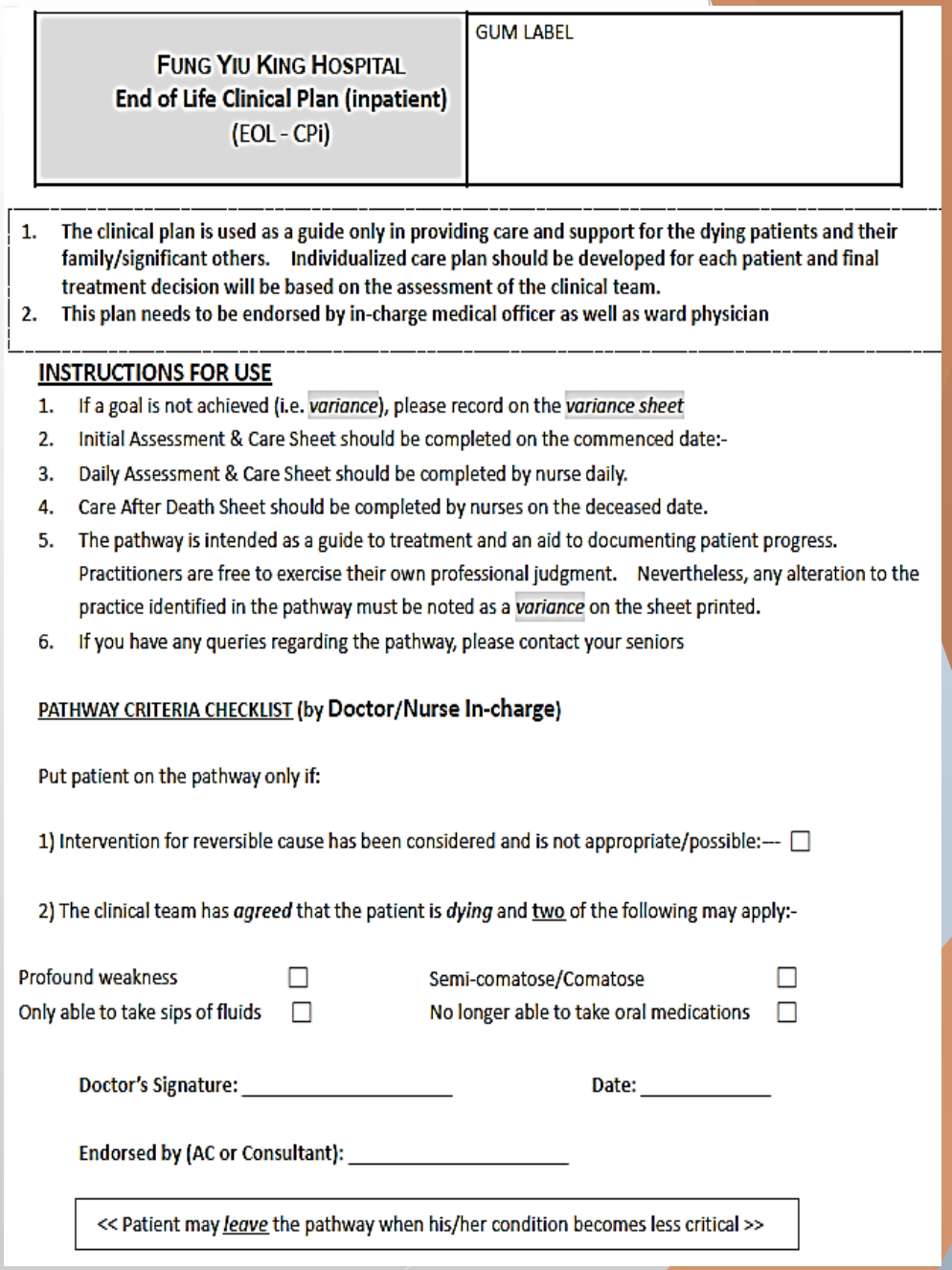
Meeting Interval: Every 3 months

Membership: Chairman – COS & Cons (Geri) (Co-chair)

Members – ACs, GM/N, UM(CCS), APN (CGAT), DOM, WMs, PTI/c, OTI/c, MSW i/c, hospital chaplains (Catholics, Christianity, Buddhism)

The EOL clinical plan for inpatients (EOL-CPi) was established to improve patient in their last days of life.

- **Started on 4 June 2012**
- **Need to be endorsed by 2 doctors - medical officer and ward physician**



FUNG YIU KING HOSPITAL End of Life Clinical Plan (inpatient) (EOL – CPi)	GUM LABEL

1. The clinical plan is used as a guide only in providing care and support for the dying patients and their family/significant others. Individualized care plan should be developed for each patient and final treatment decision will be based on the assessment of the clinical team.
2. This plan needs to be endorsed by in-charge medical officer as well as ward physician

INSTRUCTIONS FOR USE

1. If a goal is not achieved (i.e. *variance*), please record on the *variance sheet*
2. Initial Assessment & Care Sheet should be completed on the commenced date:-
3. Daily Assessment & Care Sheet should be completed by nurse daily.
4. Care After Death Sheet should be completed by nurses on the deceased date.
5. The pathway is intended as a guide to treatment and an aid to documenting patient progress. Practitioners are free to exercise their own professional judgment. Nevertheless, any alteration to the practice identified in the pathway must be noted as a *variance* on the sheet printed.
6. If you have any queries regarding the pathway, please contact your seniors

PATHWAY CRITERIA CHECKLIST (by **Doctor/Nurse In-charge**)

Put patient on the pathway only if:

1) Intervention for reversible cause has been considered and is not appropriate/possible:— ☐

2) The clinical team has ***agreed*** that the patient is ***dying*** and two of the following may apply:-

Profound weakness	☐	Semi-comatose/Comatose	☐
Only able to take sips of fluids	☐	No longer able to take oral medications	☐

Doctor's Signature: _____ **Date:** _____

Endorsed by (AC or Consultant): _____

<< Patient may *leave* the pathway when his/her condition becomes less critical >>

Goals and success criteria for end-of-life clinical plan for inpatients

Table 1

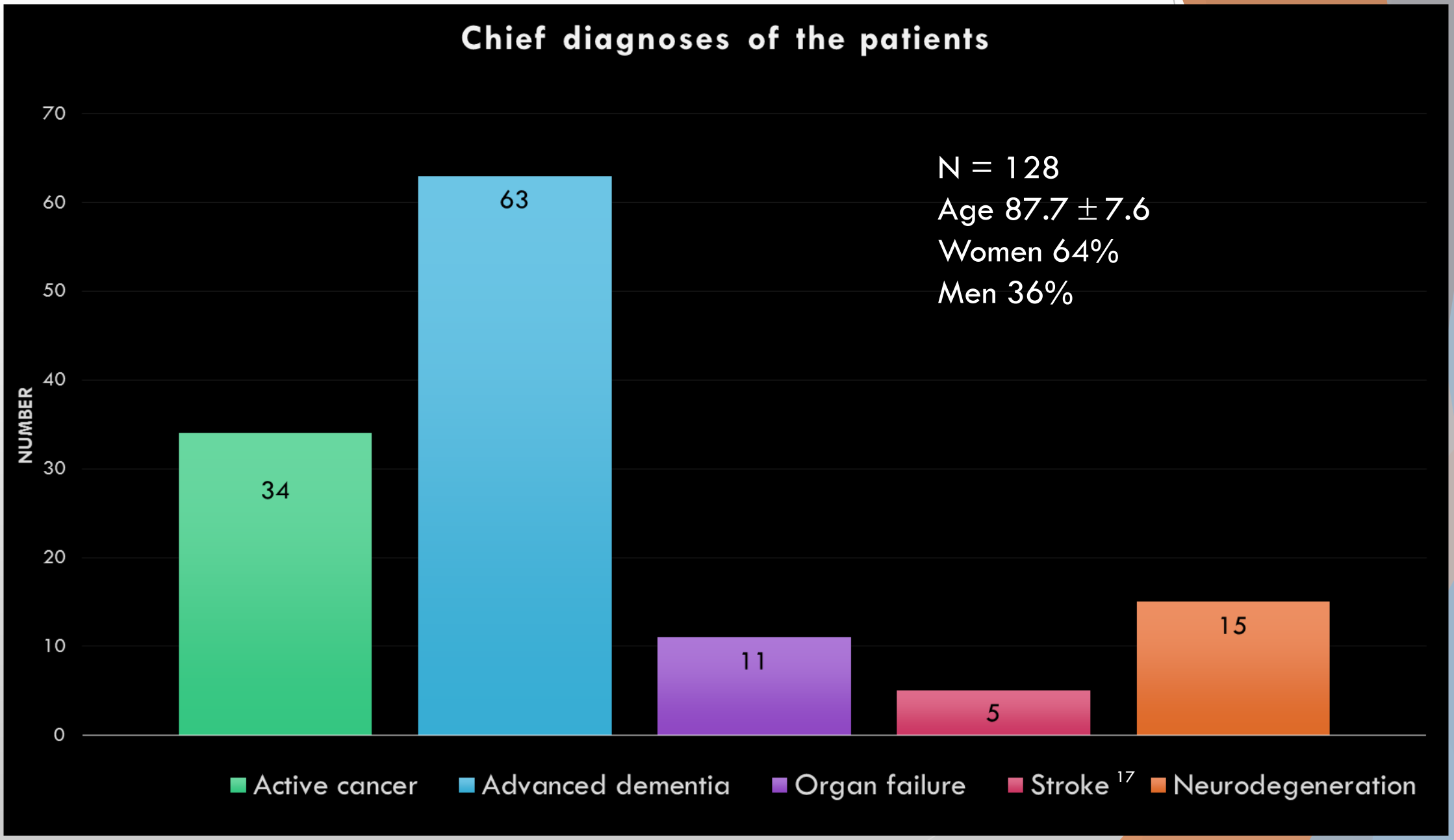
GOALS	SUCCESS CRITERIA
• Current medication assessed and non-essential medications discontinued	• Inappropriate or unnecessary medications discontinued • Appropriate "as needed" medications given
• Withdraw / withhold inappropriate interventions	• Withdraw/withhold unnecessary blood tests, blood product transfusion, high flow oxygen, broad spectrum (Big Gun) antibiotics
• Unnecessary nursing interventions discontinued	• Reduce frequent haemoglucostix monitoring • Avoidance of physical restraints • Reposition for comfort and pressure sore prevention only
• Religious and spiritual needs assessed	• Patient or family members assessed for religious and spiritual needs
• Plan of care is explained and discussed with patients or family members	• Patient or family aware of prognosis and understand the plan of care • DNACPR signed
• Symptom assessment and treatment given appropriately	• Patient has satisfactory symptom control in the last 24 hours
• Care at and after death	• Flexible visiting hours given to family members • Family members able to say goodbye at the last moment • Hospital policy followed for patient belongings • Information provided to family members about the procedures after death • Family emotions acknowledged and handled

Study to evaluate EOL CPi

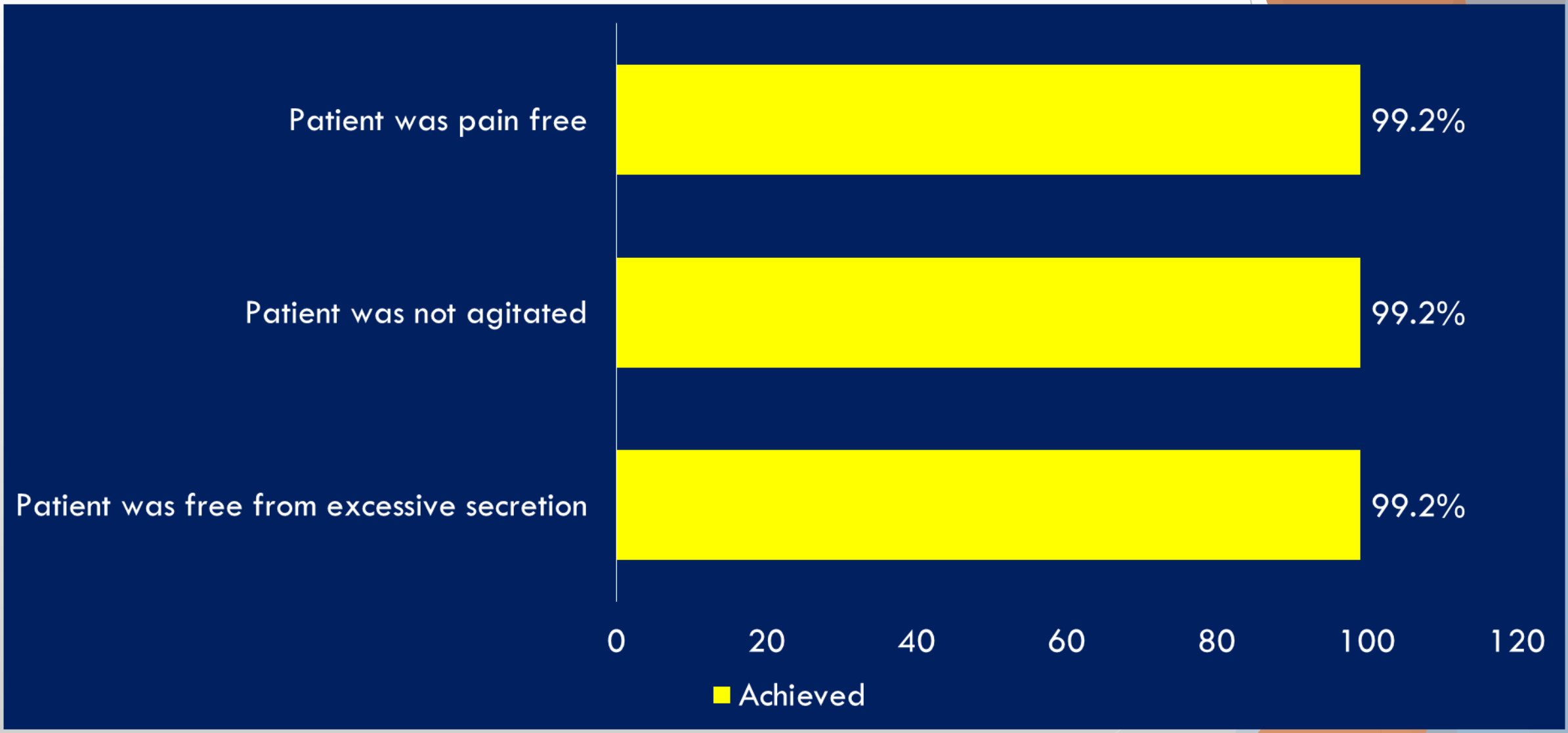
- To evaluate the outcomes of EOL-CPi in terms of its ability to enhance EOL care for dying older patients.
- All FYKH M&G Ward patients with age ≥ 65 who had been started the EOL-CPi between 4 June 2012 and 3 June 2014 were studied retrospectively.
- This study protocol was approved by the IRB HKU/HKWC.

- N = 128
- LOS = 16.1 ± 13.9 (range 1 to 66 days)
- Length of EOL CPi = 4.15 ± 6.5 days (range 1 to 55)

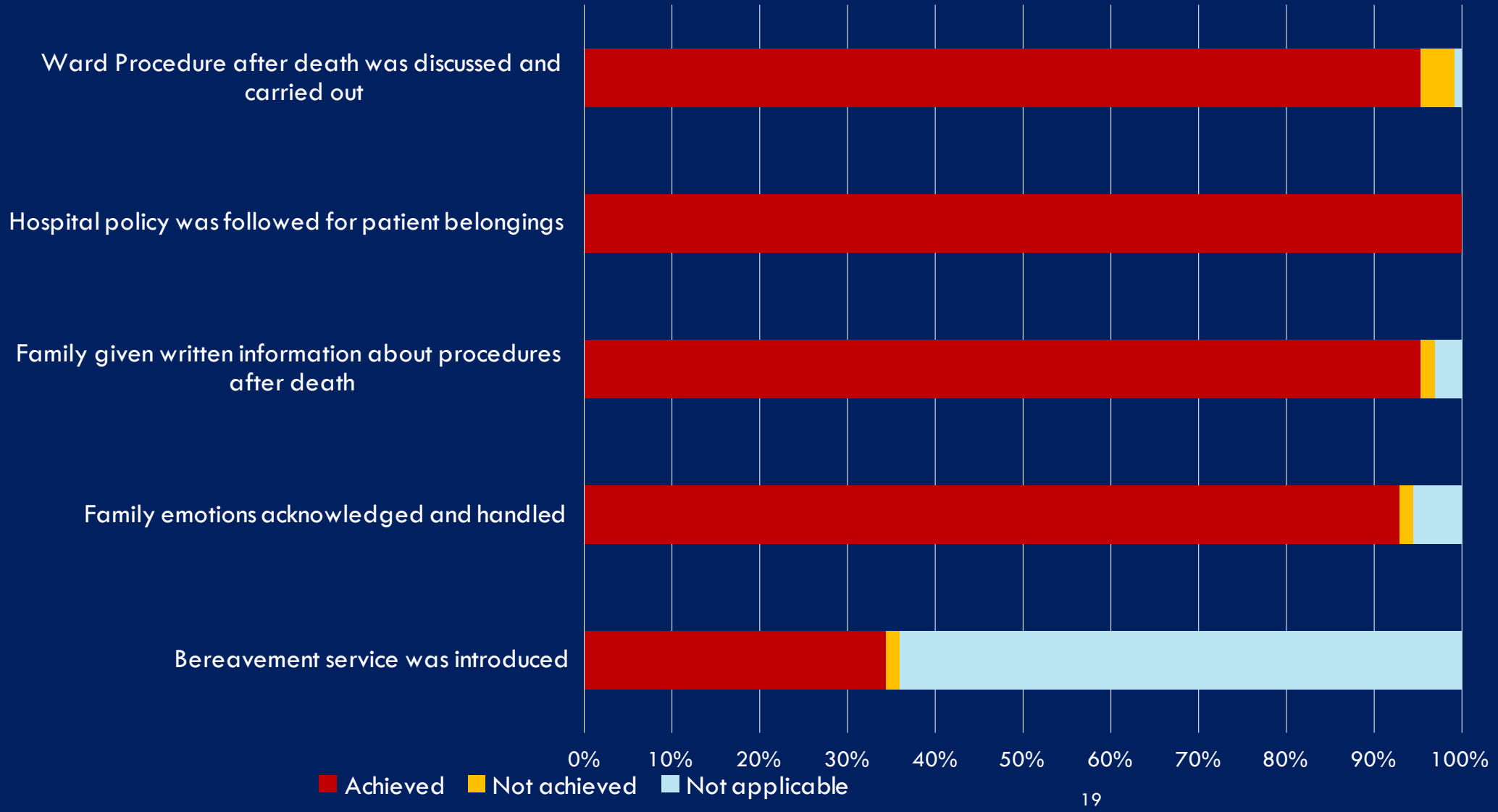
Demographics and clinical characteristics	Mean ± SD or Number (%)
Age	87.7 ± 7.6 (range 65 – 104)
Male	46(36)
Accommodation	
Home	41(32)
Residential care home	87(68)
Premorbid mobility	
Independent walker	12(9)
Supervised walker	3(2)
Assisted walker	15(12)
Chairbound	28(22)
Bedbound	70(55)
Premorbid functional state	
ADL partial dependent	10(16)
ADL dependent	108(84)
Incontinence	111(87)
Nasogastric tube feeding	55(43)


Chief diagnoses of the patients
NUMBER
70
60
50
40
30
20
10
0
34
63
11
5
15
N = 128
Age 87.7 ± 7.6
Women 64%
Men 36%
Active cancer
Advanced dementia
Organ failure
Stroke [17]
Neurodegeneration

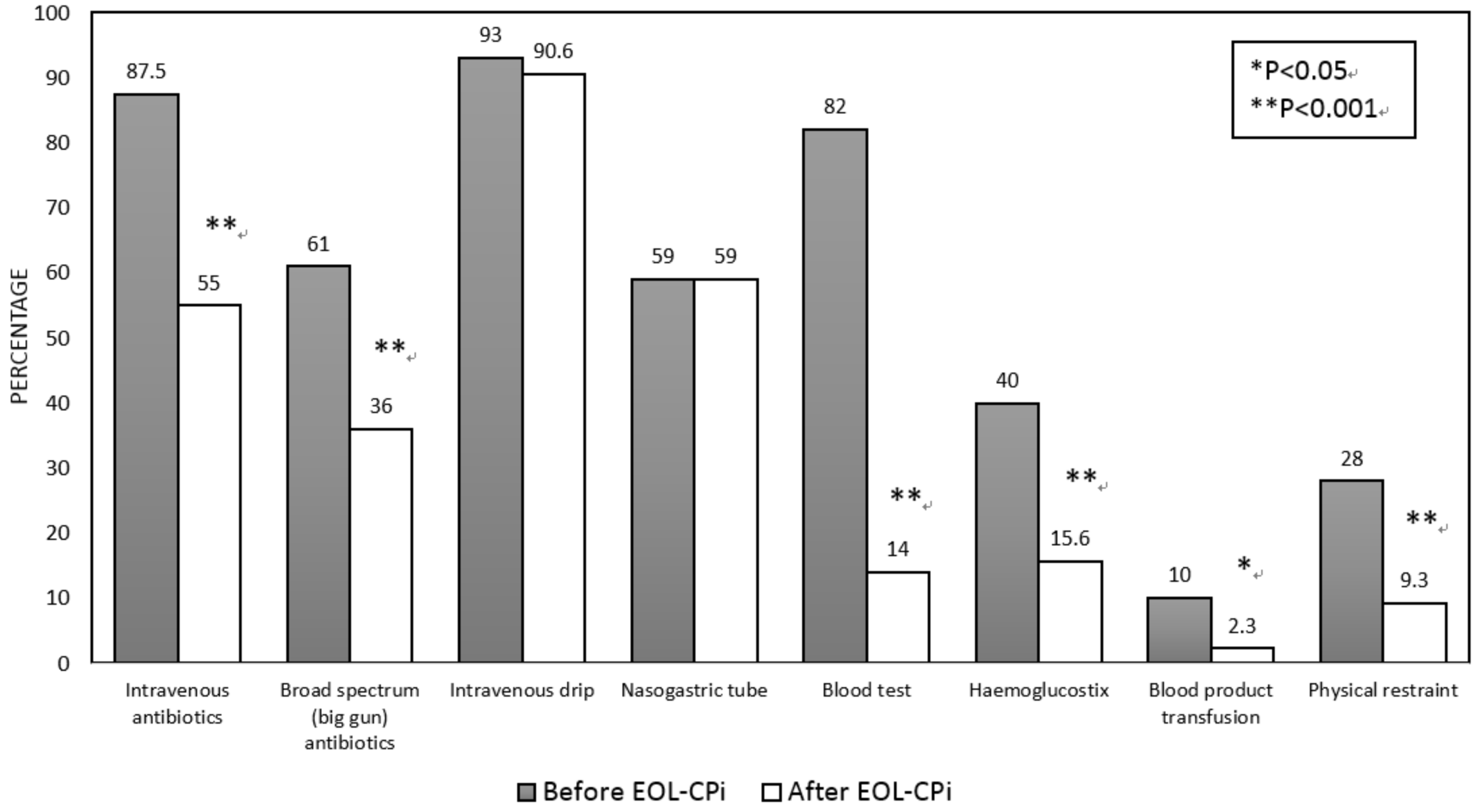
Symptom control in the last 24 hours



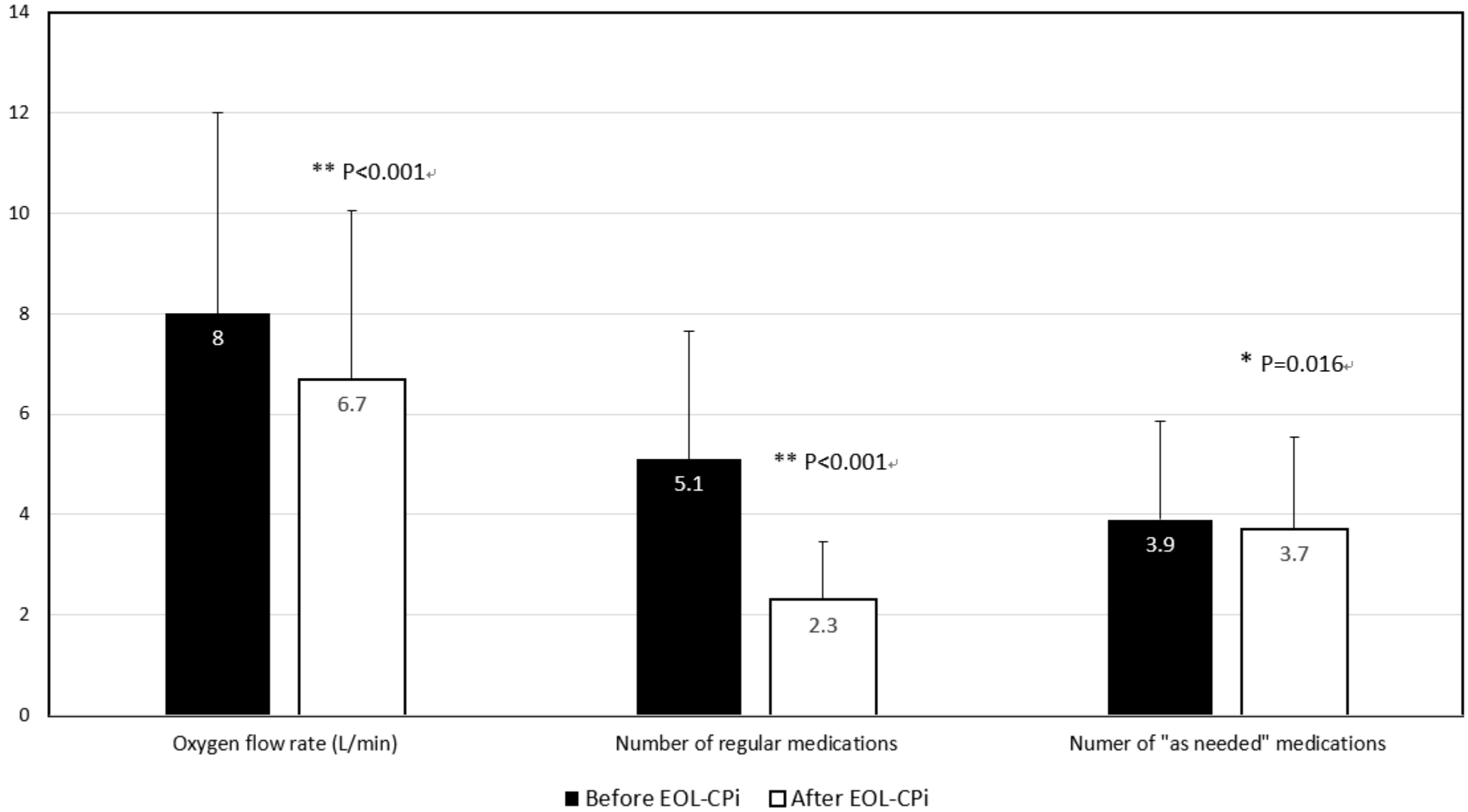
Care after death



Change of management approach after starting EOL-CPi



Oxygen and medications before and after EOL-CPi

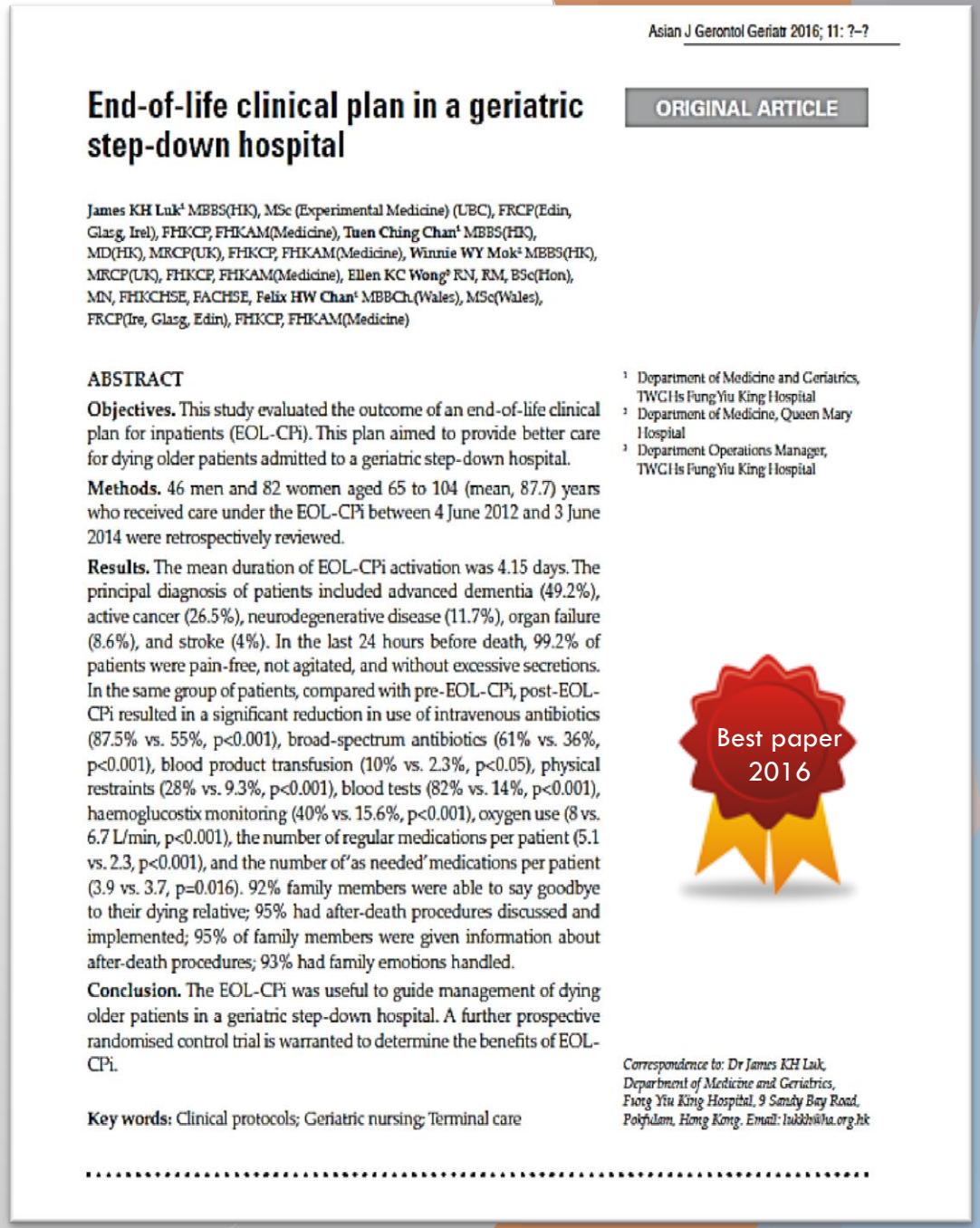


Family able to say goodbye at death

Conclusions

- A tailored made EOL clinical plan enhanced EOL care for dying older patients in a geriatric step-down hospital.
- Foster a change in management approach with more emphasis on comfort care
- **Results published in *Asian J Gerontol Geriatr***

  ****Best AJGG paper award 2016**



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End-of-life clinical plan in a geriatric step-down hospital

ORIGINAL ARTICLE

James KH Luk[1] MBBS(HK), MSc (Experimental Medicine) (UBC), FRCP(Edin, Glasg, Irel), FHKCP, FHKAM(Medicine), Tuen Ching Chan[1] MBBS(HK), MD(HK), MRCP(UK), FHKCP, FHKAM(Medicine), Winnie WY Mok[2] MBBS(HK), MRCP(UK), FHKCP, FHKAM(Medicine), Ellen KC Wong[3] RN, RM, BSc(Hon), MN, FHKCHSE, FACHSE, Felix HW Chan[1] MBBCh.(Wales), MSc(Wales), FRCP(Ire, Glasg, Edin), FHKCP, FHKAM(Medicine)

[1] Department of Medicine and Geriatrics, TWGHs Fung Yiu King Hospital
[2] Department of Medicine, Queen Mary Hospital
[3] Department Operations Manager, TWGHs Fung Yiu King Hospital

ABSTRACT

Objectives. This study evaluated the outcome of an end-of-life clinical plan for inpatients (EOL-CPi). This plan aimed to provide better care for dying older patients admitted to a geriatric step-down hospital.

Methods. 46 men and 82 women aged 65 to 104 (mean, 87.7) years who received care under the EOL-CPi between 4 June 2012 and 3 June 2014 were retrospectively reviewed.

Results. The mean duration of EOL-CPi activation was 4.15 days. The principal diagnosis of patients included advanced dementia (49.2%), active cancer (26.5%), neurodegenerative disease (11.7%), organ failure (8.6%), and stroke (4%). In the last 24 hours before death, 99.2% of patients were pain-free, not agitated, and without excessive secretions. In the same group of patients, compared with pre-EOL-CPi, post-EOL-CPi resulted in a significant reduction in use of intravenous antibiotics (87.5% vs. 55%, p<0.001), broad-spectrum antibiotics (61% vs. 36%, p<0.001), blood product transfusion (10% vs. 2.3%, p<0.05), physical restraints (28% vs. 9.3%, p<0.001), blood tests (82% vs. 14%, p<0.001), haemoglucostix monitoring (40% vs. 15.6%, p<0.001), oxygen use (8 vs. 6.7 L/min, p<0.001), the number of regular medications per patient (5.1 vs. 2.3, p<0.001), and the number of 'as needed' medications per patient (3.9 vs. 3.7, p=0.016). 92% family members were able to say goodbye to their dying relative; 95% had after-death procedures discussed and implemented; 95% of family members were given information about after-death procedures; 93% had family emotions handled.

Conclusion. The EOL-CPi was useful to guide management of dying older patients in a geriatric step-down hospital. A further prospective randomised control trial is warranted to determine the benefits of EOL-CPi.

Key words: Clinical protocols; Geriatric nursing; Terminal care

Correspondence to: Dr James KH Luk, Department of Medicine and Geriatrics, Fung Yiu King Hospital, 9 Sandy Bay Road, Pokfulam, Hong Kong. Email: lukkh@ha.org.hk

Best paper 2016

FYKH 4A EOL Ward

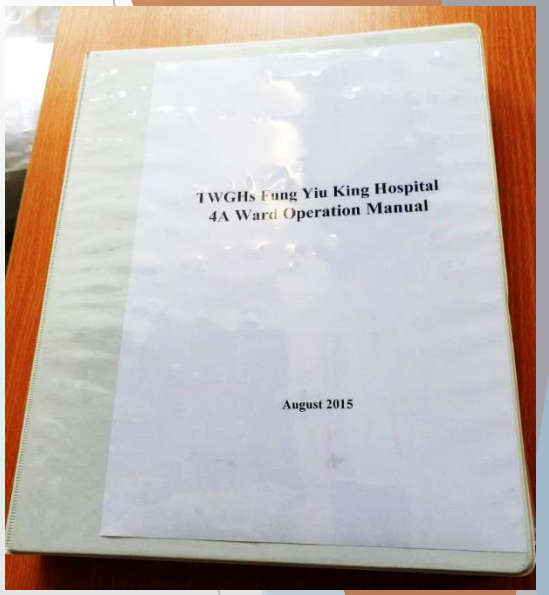
HAHO 2014/2015 Resource Allocation Exercise (RAE) supported the establishment of an EOL ward (4A ward)

- A mixed ward with 8 beds (4 male, 4 female beds)
- Provide a comfortable areas for EOL patients
- Emphasis on physical, spiritual, and psychosocial care to foster dignified and good death (Chaplain, PT, OT, MSW support)
- Allow family members to stay behind as long as possible to accompany their dying family members

4A EOL ward special features

- Warm color tone in walls
- Covered oxygen gas and suction
- Lighting – 2 systems
  - Adequate ward lighting for usual clinical services
  - Dimming lighting for patient rest and spiritual care
- Individual partition for each patient
- Individual TV
- Small washing basin for each patient to foster patient tender-loving care by family
- Small cabinet for storage
- Reclining chair next to the patient bed for family members to stay and even sleep at night
- Side room for family members to rest and watch TV

Logistics of 4A EOL Ward admission



Transfer from FYKH 3B & 4B M&G wards

Direct transfer from QMH Medical Wards

Clinical admission from nursing home under CGAT EOL program in RCHEs

Endorsed by Geriatricians

4A EOL Ward

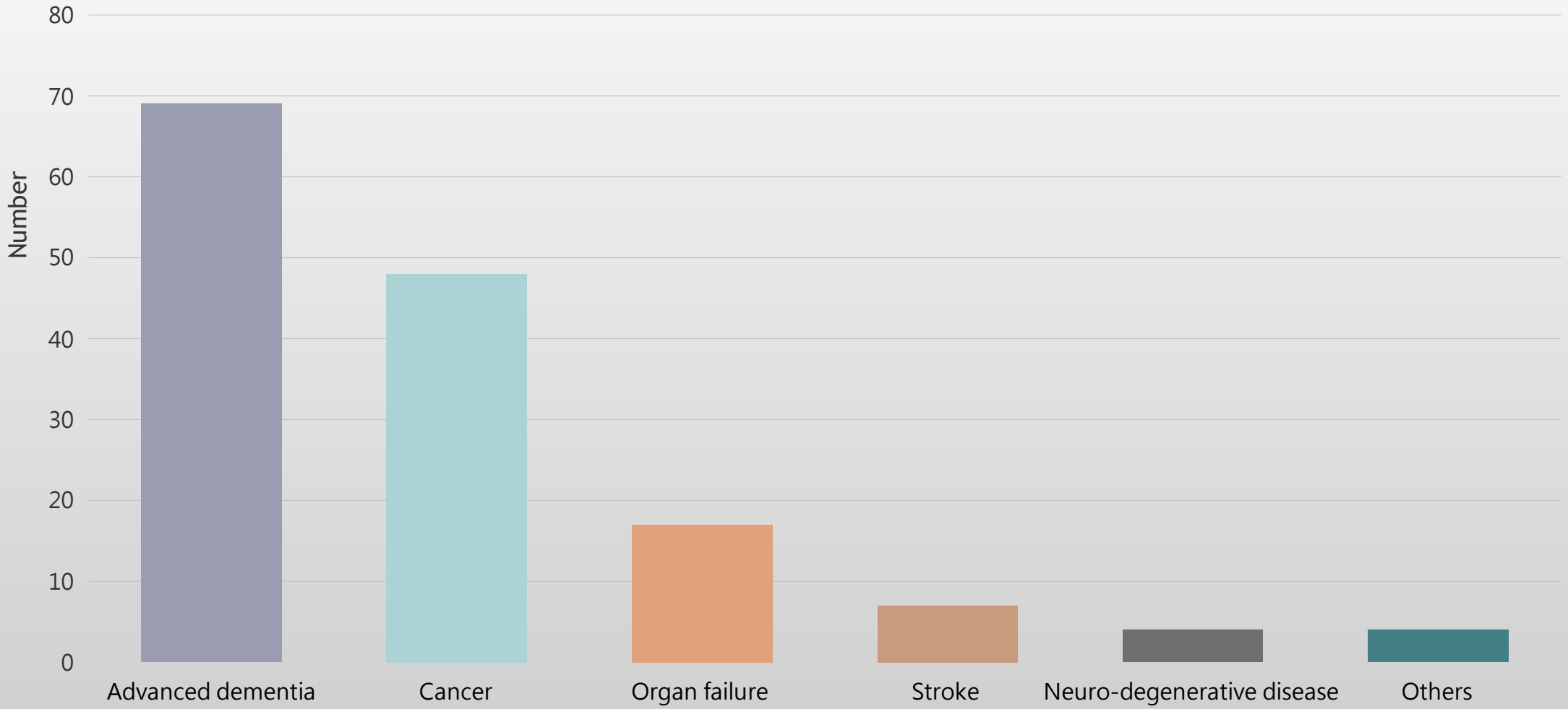
Can end of life ward benefit dying older patients in a geriatric step-down hospital?

TWGHs Research Fund Sponsored Study

Demographics (N=149)	Mean ± SD or Number (%)
Age	87.2 ± 7.8 (range:65-107)
Male	63(42.3)
Marital status	
Single	12(8.1)
Married	52(35)
Divorced	6(4)
Widowed	79(53)
Financial support	
Depends on family	8(4)
Disability allowance (NDA)	19(12.8)
Old age allowance (OA)	60(40)
CSSA	64(43)
Accommodation	
Home	44(29.5)
Residential care home	105(70.5)
CGAT End of Life case (ECEOL)	11(7.4)

LOS in EOL ward = 9.3 ± 9.4 days

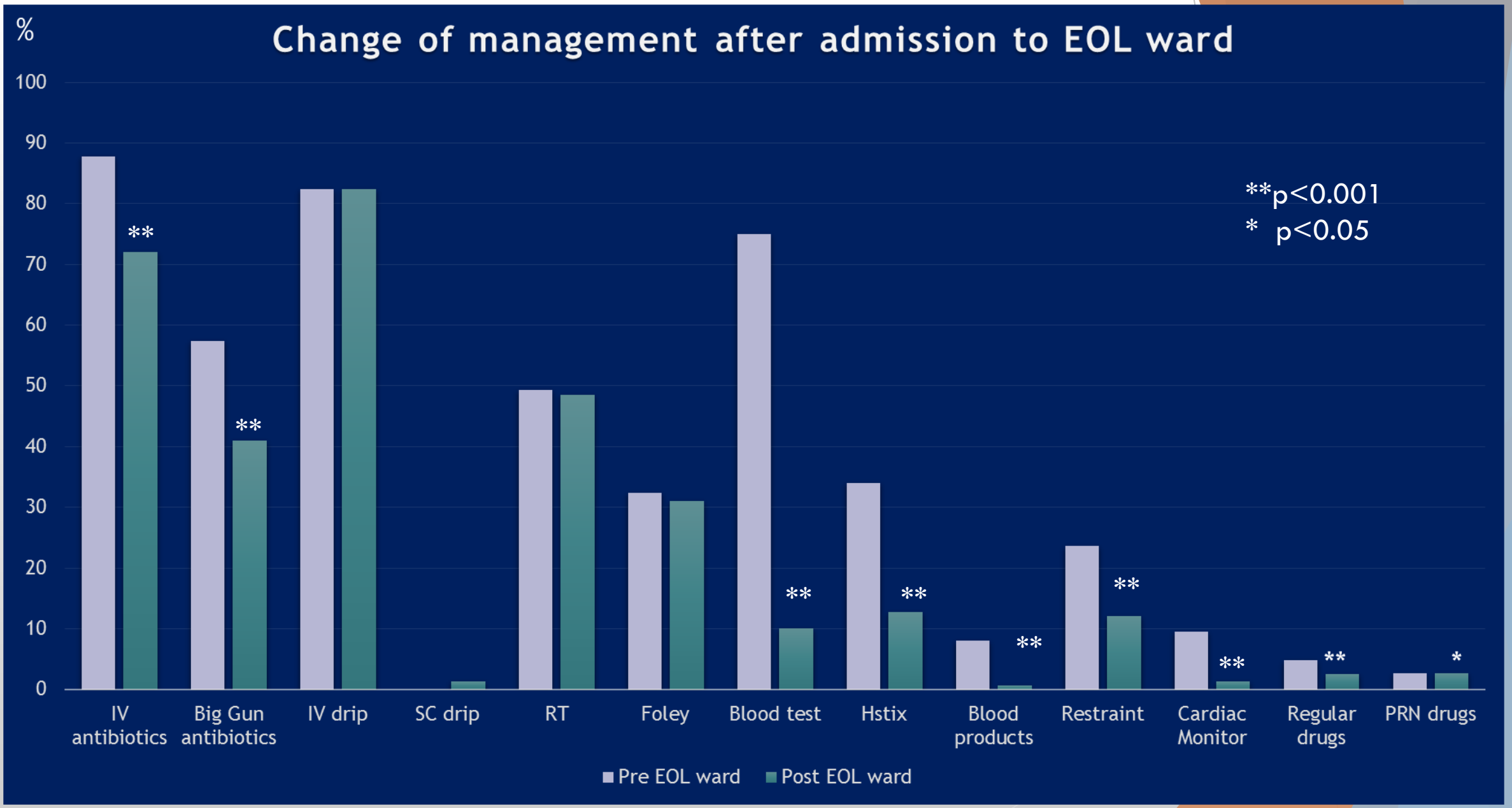
Diagnoses


Number
80
70
60
50
40
30
20
10
0
Advanced dementia
Cancer
Organ failure
Stroke
Neuro-degenerative disease
Others

Clinical Characteristics (N=149)	Mean ± SD or Number (%)
Urinary incontinence	119(80)
RT	63(42.3)
PEG	2(1.3)
Premorbid mobility	
Independent walker	7(4.7)
Supervised walker	3(2)
Assisted walker	16(10.7)
Chairbound	34(22.8)
Bedbound	89(59.7)
Premorbid functional state	
ADL independent	17(11.4)
ADL partial dependent	13(8.7)
ADL dependent	119(80)
Norton score	8.8 ± 1.98

Bio-ethical background (N=149)	**Mean ± SD or Number (%)**
Guardianship case	1(0.7)
Advance Care Planning established before admission*	10(6.7)
DNACPR (non-hospitalized) established before admission*	10(6.7)
*CGAT ECEOL cases	

Services in EOL ward (N=149)	Mean ± SD or Number (%)
DNA CPR	149(100)
EOL CPi	149(100)
Physiotherapy	139(93.3)
Occupational therapy	137(91.9)
Social Worker	135(90.6)
Carers	
Staying with patients after visiting hours	128(86)
Made use of the side room for rest	126(84.6)
Watched TV	122(82)
Family members able to stay with patients and say goodbye at the last moment	125(84)


Change of management after admission to EOL ward
%
100
90
80
70
60
50
40
30
20
10
0
**p<0.001
* p<0.05
**
**
**
**
**
**
**
**
*
IV antibiotics
Big Gun antibiotics
IV drip
SC drip
RT
Foley
Blood test
Hstix
Blood products
Restraint
Cardiac Monitor
Regular drugs
PRN drugs
Pre EOL ward
Post EOL ward

The Quality of Dying and Death Questionnaire (QODD)

1 How often did X_____ appear to have her/his pain under control?....

None of the Time	A Little Bit of the Time	Some of the Time	A Good Bit of the Time	Most of the Time	All of the Time	DON'T KNOW

2 How often did X_____ breathe comfortably?

None of the Time	A Little Bit of the Time	Some of the Time	A Good Bit of the Time	Most of the Time	All of the Time	DON'T KNOW

3 How often did X_____ appear to feel at peace with dying?

None of the Time	A Little Bit of the Time	Some of the Time	A Good Bit of the Time	Most of the Time	All of the Time	DON'T KNOW

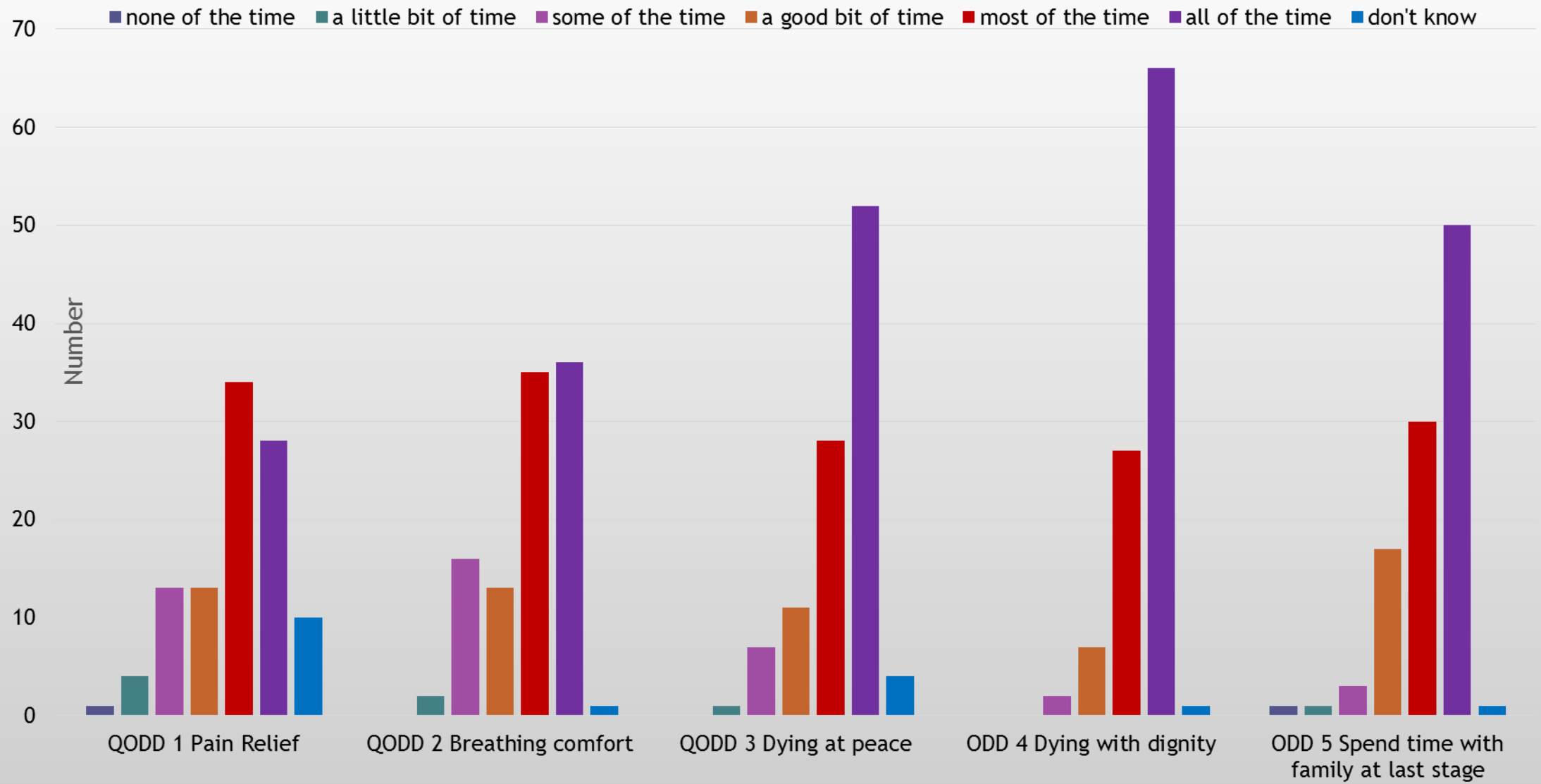
4 How often did X_____ appear to keep her/his dignity and self-respect?

None of the Time	A Little Bit of the Time	Some of the Time	A Good Bit of the Time	Most of the Time	All of the Time	DON'T KNOW

5 How often did X_____ spend time with other family and friends?

None of the Time	A Little Bit of the Time	Some of the Time	A Good Bit of the Time	Most of the Time	All of the Time	DON'T KNOW

QODD Question 1 to 5 (N=103)



6 **Was X_____ touched or hugged by her/his loved ones?**

YES
NO
DON'T KNOW

7 **Did X_____ say goodbye to loved ones?**

YES
NO
DON'T KNOW

8 **Did X_____ have one or more visits from a religious or spiritual advisor?**

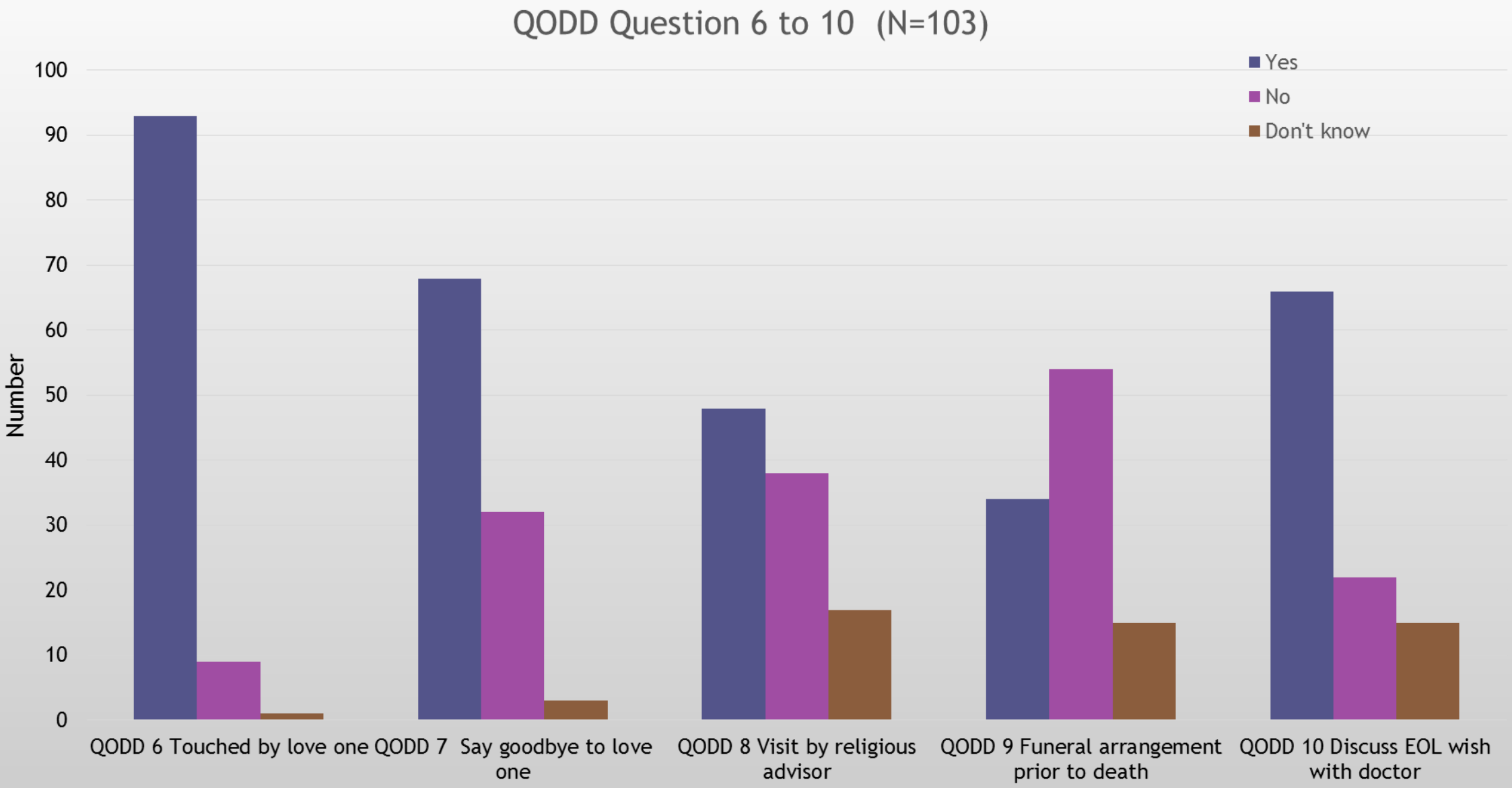
YES
NO
DON'T KNOW

9 **Did X_____ have her/his funeral arrangements in order prior to death?**

YES
NO
DON'T KNOW

10 **Did X_____ discuss her/his wishes for end of life care with her/his doctor --for example, resuscitation or intensive care?**

YES
NO
DON'T KNOW


QODD Question 6 to 10 (N=103)
Yes
No
Don't know
Number
100
90
80
70
60
50
40
30
20
10
0
QODD 6 Touched by love one
QODD 7 Say goodbye to love one
QODD 8 Visit by religious advisor
QODD 9 Funeral arrangement prior to death
QODD 10 Discuss EOL wish with doctor

11 How would you rate this aspect of X _____ 's dying experience?

Terrible Experience										Almost Perfect	DON'T KNOW
0	1	2	3	4	5	6	7	8	9	10	

8.6 ± 1.5

Careful (Comfort) Hand Feeding
人手小心餵食

Feeding Problems in EOL patients

- Feeding problems are common in older people in EOL situation e.g. advanced dementia.
- When eating difficulties arise, unless there is a valid advance directive refusing enteral feeding, tube feeding is often started.
- Tube feeding itself has many pitfalls and complications.
- No benefits in terms of survival, nutrition and prevention of aspiration have been demonstrated.
- Careful hand feeding is an alternative to tube feeding

Ref: Hospital Authority. HA Guidelines on Life-Sustaining Treatment in the Terminally ill 2015. Hospital Authority.

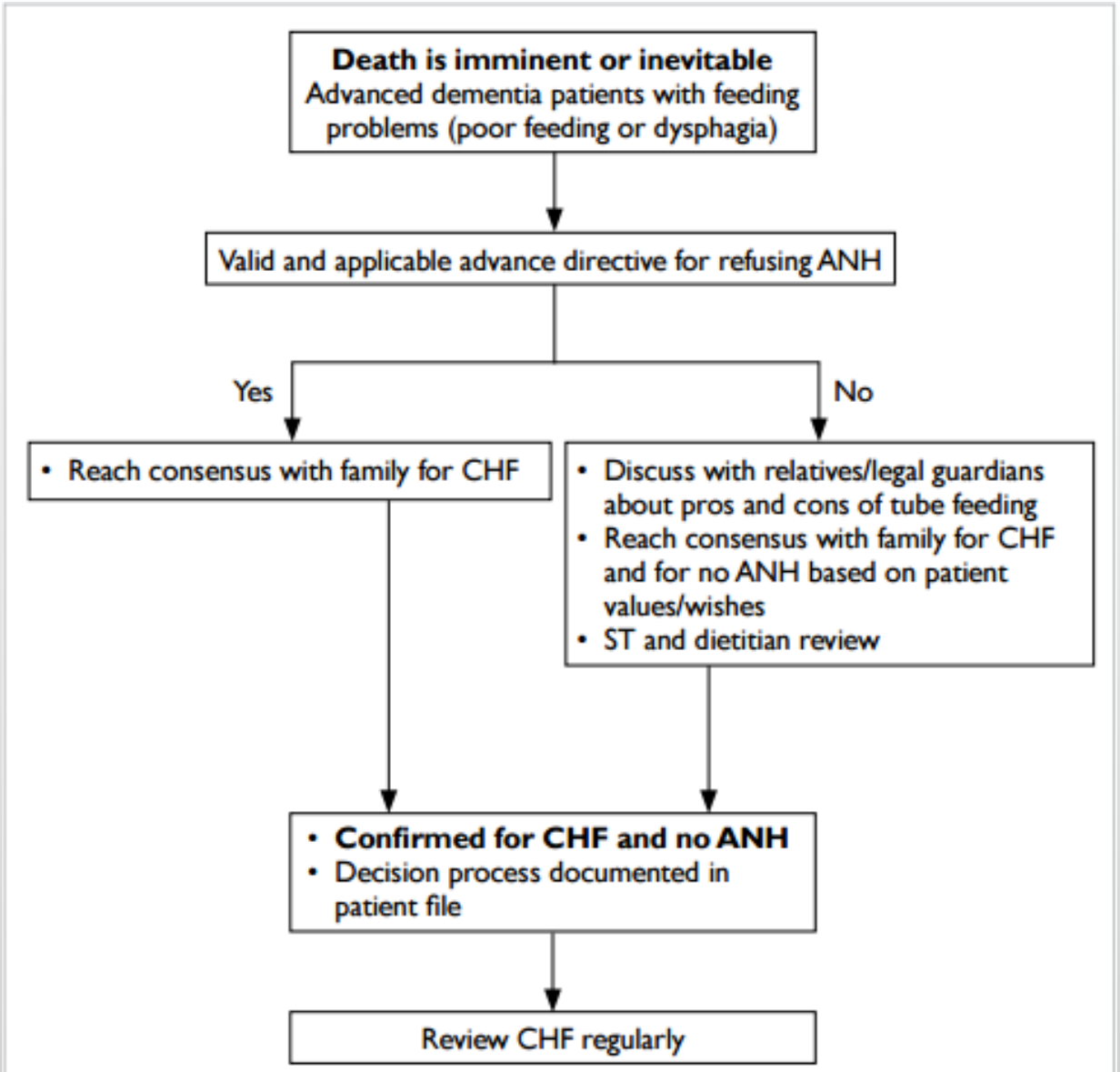
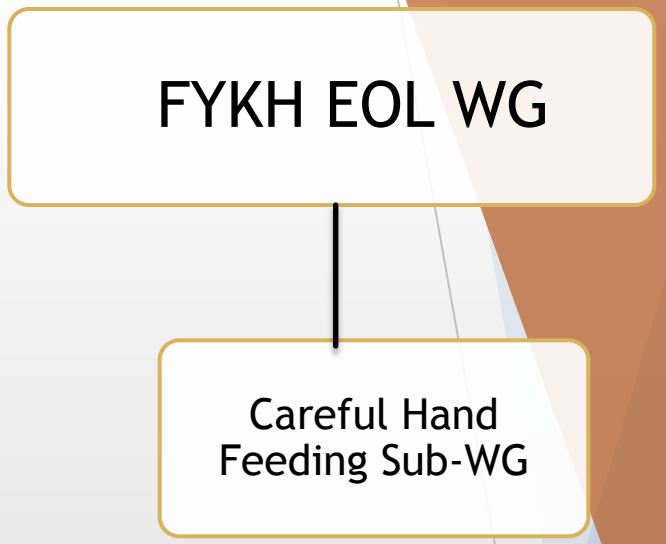


FIG 1. Careful hand feeding workflow for patients facing imminent death
Abbreviations: ANH = artificial nutrition and hydration; CHF = careful hand feeding; ST = speech therapist

Careful Hand Feeding in FYKH

1. Under the FYKH EOL WG, a ***Careful Hand Feeding Sub-Working Group*** was established (geriatricians, nurses, speech therapist and dietitian) to promote Careful Hand Feeding in FYKH
2. Education of staff (CNE program)
3. Workflow and logistics



TWGHs Fung Yiu King Hospital

東華三院馮堯敬醫院

Gum Label

COMMUNICATION RECORD ON CAREFUL HAND FEEDING
舒適餵食溝通記錄

1. 本文件用作記錄醫生與病人*/親屬* 曾就病人「舒適餵食」議題進行適切溝通。
2. 病人*/親屬*已知道經評估後，發現病人吞食食物有出現氣嗆*/插入不足* 的風險。
3. 因此，醫生建議病人以「鼻胃管餵食」為餵食選項之一。
4. 醫生亦已向病人*/親屬*詳細解釋了評估結果和病人繼續口服餵食的風險；如營養/食物插入不足、吸入性肺炎、死亡等。
5. 病人*/親屬* 並已了解「舒適餵食」的實際方法和風險，而醫護人員將會定期監測病人的餵食狀況。
6. 病人*/親屬* 希望繼續採納「舒適餵食」而不選擇「鼻胃管餵食」的意願被受尊重及理解。

1. This document serves to record the communication/consensus reached by case medical officer with patient*/ relatives* for ***Careful Hand Feeding***.
2. After assessment, the patient was found to have risk of aspiration* / inadequate intake* on oral feeding.
3. Enteral feeding such as nasogastric tube feeding was proposed to patient as one of the feeding options.
4. Results of the assessment and risk of continue oral feeding (inadequate nutrition and food intake, aspiration pneumonia, death) has been explained to patient*/ relatives* by doctor.
5. The patient*/ relatives* understand its practical methods and risks and the patient will be monitored at regular intervals.
6. Consensus was made, based on the wish was being respect and understood of the patient*/ relatives* to continue oral feeding by ***Careful Hand Feeding*** instead of nasogastric tube feeding.

*Delete if inappropriate 請刪去不適用者

Doctor 醫生:	Signature 簽名:
Geriatrician 老人科醫生	Signature 簽名:
Relatives 家屬姓名:	Relationship with patient 與病者的關係:
Date 日期:	

The feeding paradox in advanced dementia: a local perspective

James KH Luk *, Felix HW Chan, Elsie Hui, CY Tse

ABSTRACT

Feeding problems are common in older people with advanced dementia. When eating difficulties arise tube feeding is often initiated, unless there is a valid advance directive that refuses enteral feeding. Tube feeding has many pitfalls and complications. To date, no benefits in terms of survival, nutrition, or prevention of aspiration pneumonia have been demonstrated. Careful hand feeding is an alternative to tube feeding with advanced dementia. In Hong Kong, the Hospital Authority has established clear ethical guidelines for careful hand feeding. Notwithstanding, there are many practical issues locally if tube feeding is not used in older patients with advanced dementia. Training of doctors, nurses, and other members of the health care team is vital to the promulgation of careful hand feeding. Support from the government and Hospital Authority policy, health care staff training, public education, and promotion of advance care planning and advance directive are essential to reduce the reliance on tube feeding in advanced dementia.

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[1] **JKH Luk ***, FHKCP, FHKAM (Medicine)
[1] **FHW Chan**, FHKCP, FHKAM (Medicine)
[2] **E Hui**, FHKCP, FHKAM (Medicine)
[3] **CY Tse**, FHKCCM, FHKAM (Medicine)

[1] *Department of Medicine and Geriatrics, Fung Yiu King Hospital, Pokfulam, Hong Kong*
[2] *Department of Medicine and Geriatrics, Shatin Hospital, Shatin, Hong Kong*
[3] *Hospital Authority Clinical Ethics Committee, Hospital Authority, Hong Kong*

* Corresponding author: lukkh@ha.org.hk

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