

End of Life Care in the ICU



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Introduction

29, 000 people die in Ireland each year

67% would prefer to die at home

43% die in acute hospital

20% of hospital deaths occur in the ICU

22% of ICU admissions died in 2015

For every 1 person who dies, 10 people are directly bereaved.



*“Because of the support he received,
my husband died well.”*

Because he died well, I live well”

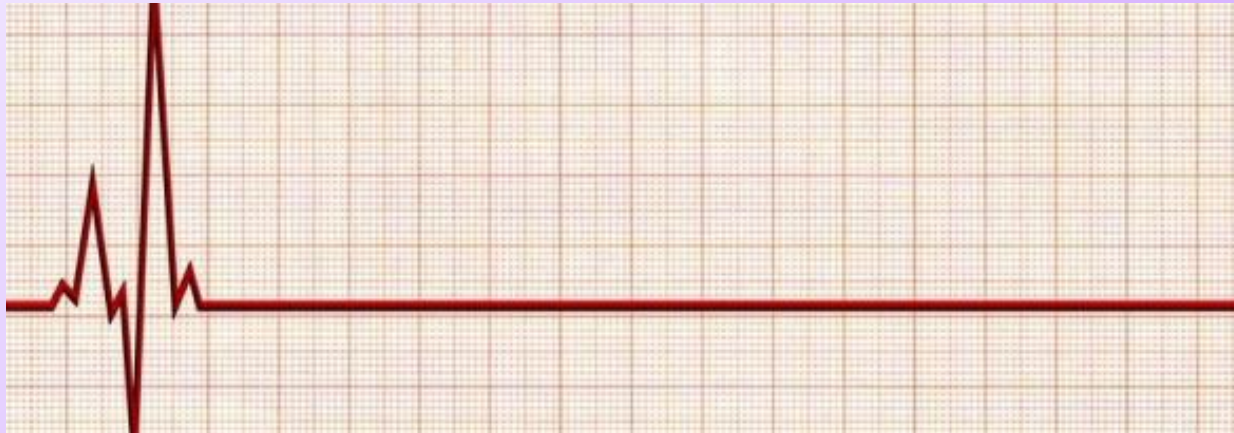
Bereaved family member, Forum on End of Life 2013



Definition of Death

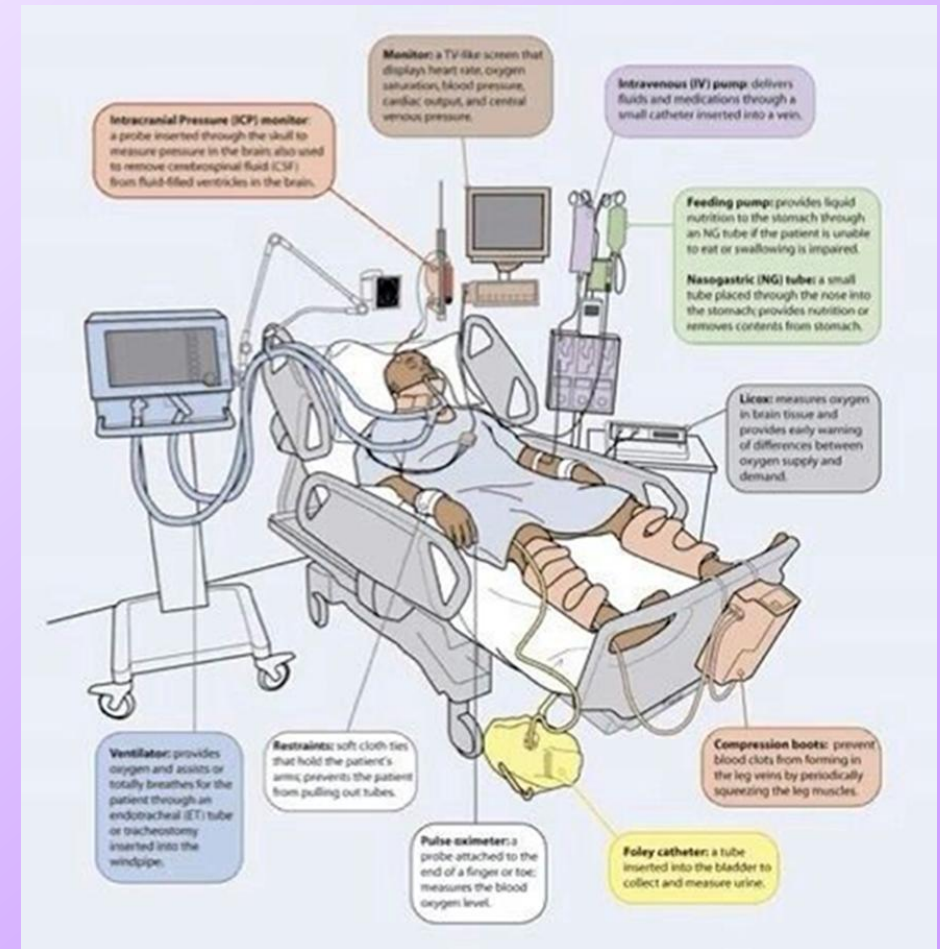
An individual who has sustained either

- Irreversible cessation of circulatory and respiratory functions, or
- Irreversible cessation of all functions of the entire brain, including the brain stem.



Type of death in ICU

- After an initial successful resuscitation
- End stage chronic disease
- New diagnosis of life limiting condition
- Sudden
- Traumatic
- Brain stem death

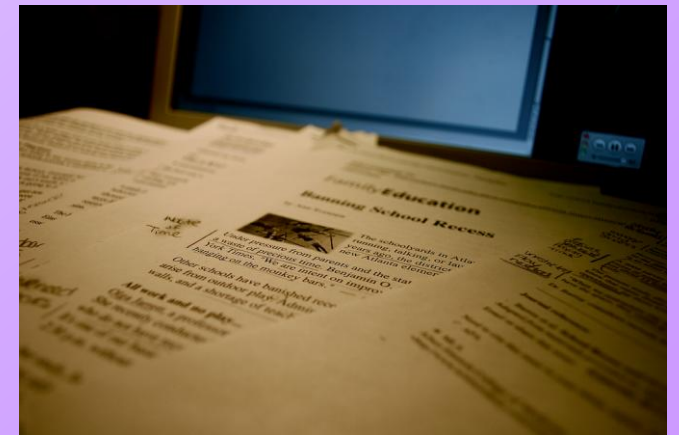


Objective

To discuss relevant literature which addresses the experience of family members when

- Preparing for a death in the ICU
- During the dying process in a clinically advanced environment
- Bereavement after a death in the ICU

and relating this to our practice.

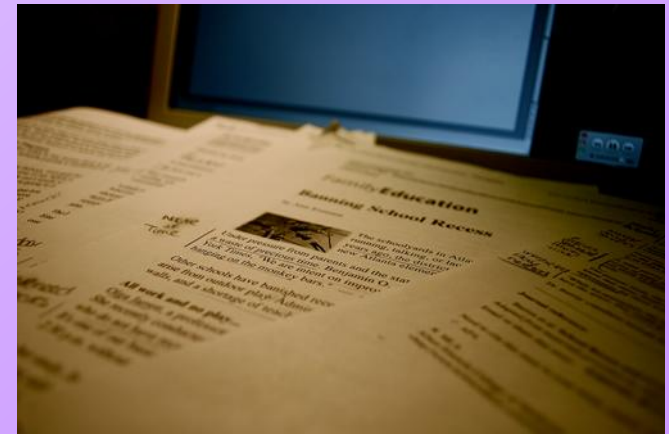


Search Strategy

Using CINAHL Plus Database, following terms were entered:

“death”, “dying”, “palliative care”, “end of life care”, “relatives”, “families”, “experiences”, “critical care”, “intensive care”, “withdrawing treatment” and “withholding treatment”.

Results were limited to last 8 years
& in the English language.



REVIEW PAPER

An integrative review of how families are prepared for, and supported during withdrawal of life-sustaining treatment in intensive care

Factors Associated With Family Satisfaction With End-of-Life Care in the ICU

A Systematic Review

ORIGINAL ARTICLE

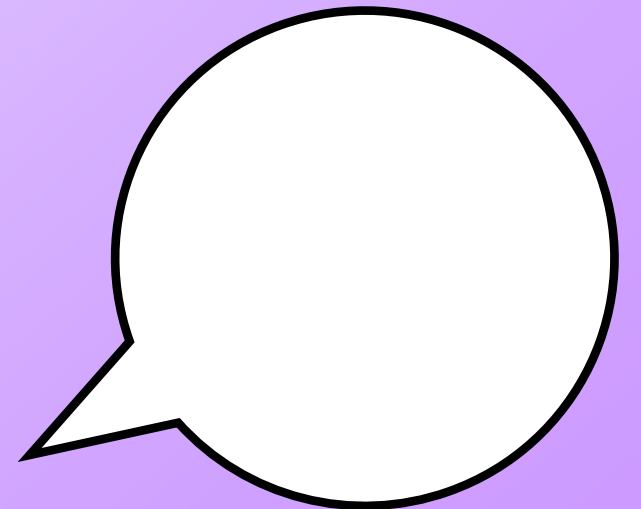
**End-of-life care in intensive care unit:
Family experiences**

Prognostic categories and timing of negative prognostic communication from critical care physicians to family members at end-of-life in an intensive care unit

Preparing for Death

Begins with communication of a poor prognosis

- This can be delayed as clinicians allow time for the patient to respond to treatment and interpret results. Although concern can be expressed.
- Identify key family members
- Arrange for quiet environment
- Clear, concise, honest, empathetic
- Allow time for questions
- Be available to follow up again
- Identify an expected time-line



Withholding vs Withdrawing

Plans can be made to **withhold** or **withdraw** treatment

- Withholding signifies that no further interventions will be added as they would not change the patient outcome
eg. addition of renal replacement therapy.
- Ethical principle of non-maleficence –
doing no harm. Not cause pain and suffering.

One family recalled agreeing to a DNR order, but then recognised that this was also interpreted as an agreement to withdraw the current level of treatment.

Withholding vs Withdrawing

- Withdrawal indicates that current treatments would be discontinued
eg. Inotropic or ventilator support
- Withdrawal of active treatment will quickly precipitate death in critical care. Average time to death following withdrawal is 2-4 hours. Therefore must be sensitively timed.

Mr. X

69 y/o Male

Hx: Hypertension, Epilepsy.

HPI: Fall at home 3 days previously, increase in seizures, now found at bottom of stairs unarousable. BIBA, GCS 3/15, pupils fixed & dilated.

CT Brain: Subarachnoid Haemorrhage, Subdural Haemorrhage, Uncal herniation

MRI Brain: large temporal haemorrhagic contusions, microhemorrhages indicative of DAI, large left occipital lobe infarct.

Family: One daughter and son-in-law



Mr. X – importance of communication

- 6 days for information to be processed and accepted
- Decision of treatment is medical decision, with family opinions considered – there should be no burden of decision making placed on family members
- Involve all disciplines- Intensivists/Neurosurgery/Palliative Care
- If treatment is withdrawn, care will continue
- Importance of language
- Try to meet family requests
- Cultural sensitivities

The Dying Process

Timing – Needs an individualised approach

- Withdrawing treatments too fast does not allow families to be prepared
- Withdrawing too slow can be prolonged and cause families to be concerned of undue discomfort to the patient

Remove unnecessary equipment

Adjust alarm limits & move to “visitors” screen

Ensure patient comfort with adequate analgesia
& sedation



The Dying Process

- Visiting
 - Allow unrestricted access for family members
 - Accommodate for vigil
 - Allow for privacy with the patient
- Ensure the patient looks as normal as possible
- Continue to update family on any changes
- Advise colleagues that someone is dying



Spiral Symbol



Inspired by ancient Irish history and is not associated with any one religion or denomination.

- Represents the interconnected cycle of life – birth, life and death.
- The white outer circle represents continuity, infinity and completion.
- Purple was chosen as the background colour as it is associated with nobility, solemnity and spirituality.

Mr. Y

35 y/o male

Polytrauma post high speed motor cycle accident

CT Brain: DAI, midbrain lesion indicative of high velocity intracranial injury.

CT Thorax: T4 vertebral fracture

CT Abdo: Right femoral artery laceration

Open pelvic fracture, right femur fracture, right tibial/fibular fracture

Mr. Y

- Unrecognisable
- Harsh metallic smell
- Obvious external fixator



Families looking back: One year after discussion of withdrawal or withholding of life-sustaining support

The nature of death, coping response and intensity of bereavement following death in the critical care environment



Nurses' experiences of providing care to bereaved families who experience unexpected death in intensive care units: A narrative overview

Nurses' experiences of caring for the suddenly bereaved in adult acute and critical care settings, and the provision of person-centred care: A qualitative study

Intensive Care Unit death and factors influencing family satisfaction of Intensive Care Unit care

After Death

Intensity of Bereavement

- Treatment and care surrounding the death, affects how families grieve.
- Bereavement from unexpected deaths affect families ability to cope and grieve.
- Sudden deaths of a spouse/partner can be devastating as there is often a simultaneous disruption to living arrangements, child care and financial security.



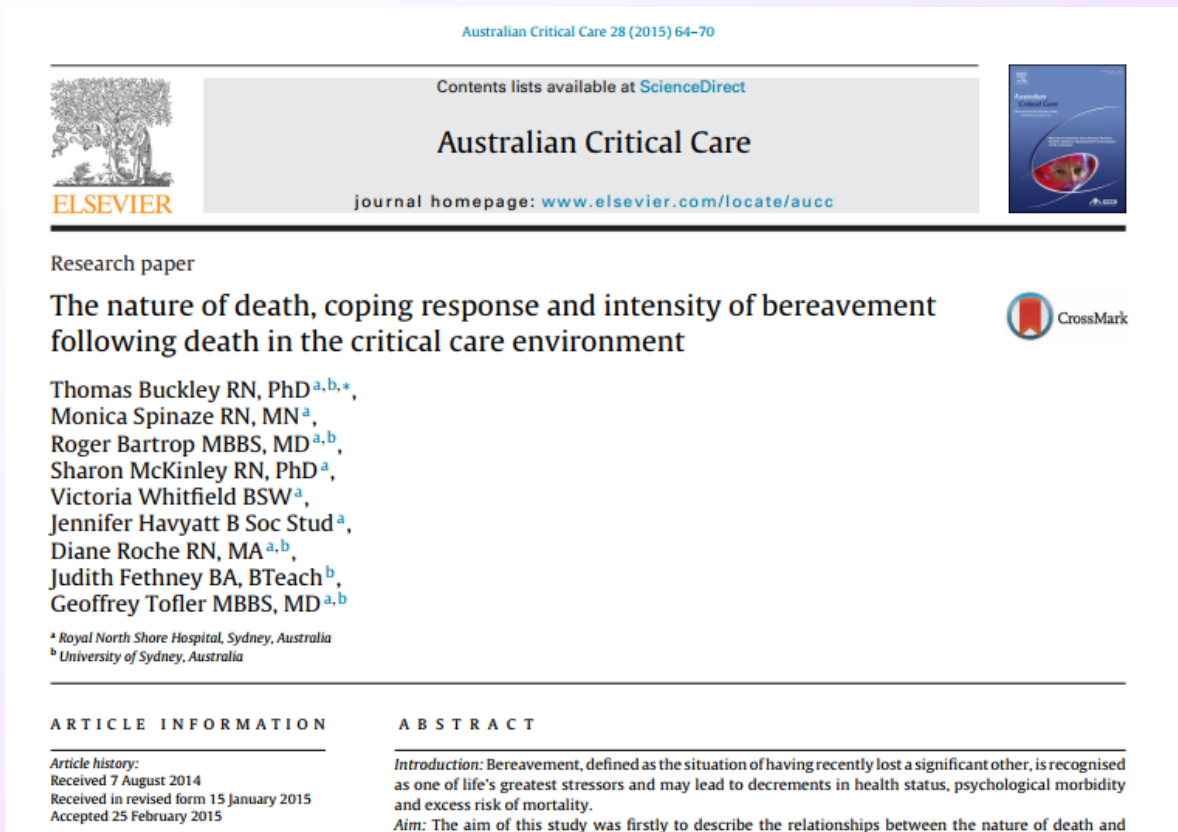
Increased Risk of PTSD after death in ICU

McAdam et al. (2012) measured traumatic stress in 41 families in 3 ICUS.

- 22 item validated questionnaire: The Impact of Event Scale
- Levels of anxiety and depression decreased over a 3 month period, although they remained above the cut-off

This is thought to be linked to families involvement in decision making at end of life, and having lasting feelings of guilt and worry if the right decision was made. Follow up meetings or phonecalls to discuss the death, and answer any further questions are considered to be beneficial.

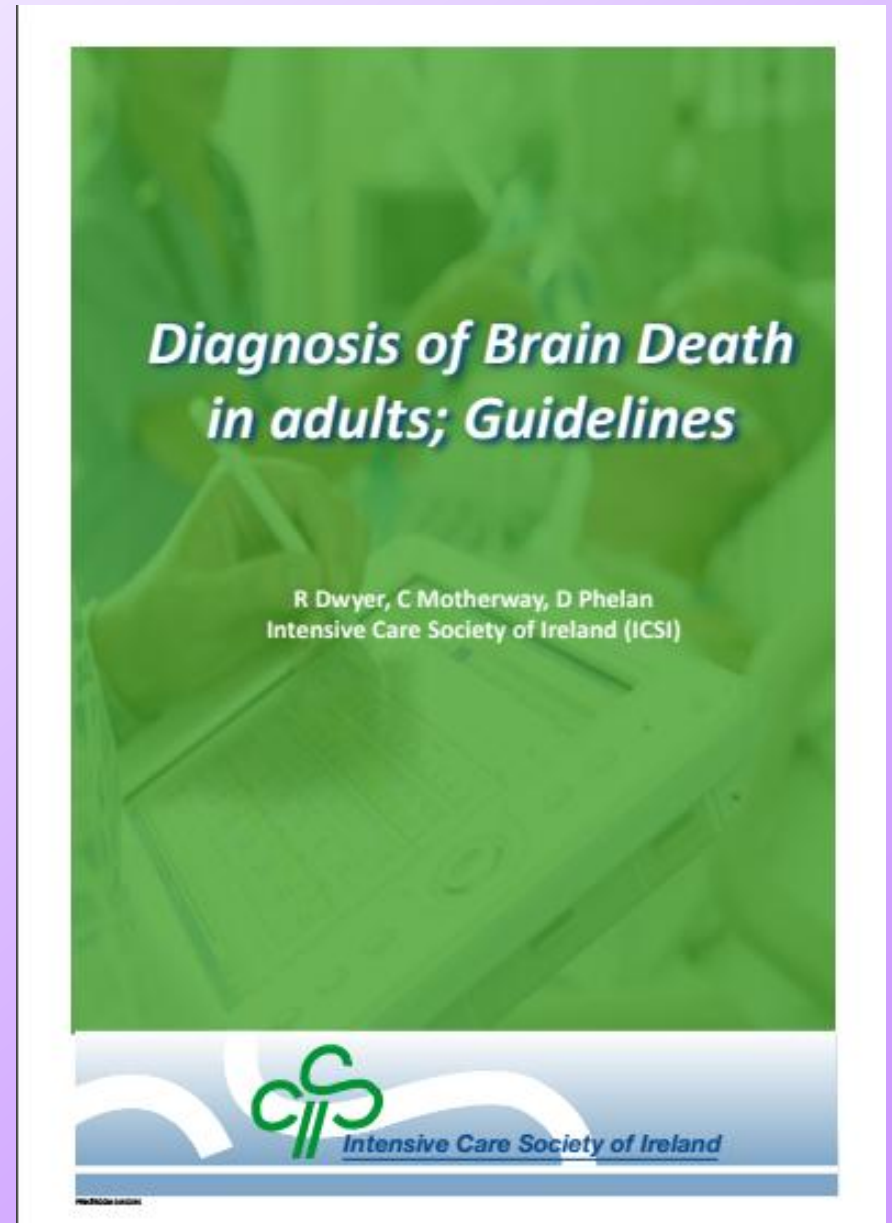
Intensity of Bereavement



- 78 participants in 5 centres
- Nature of death questionnaire @ 2 weeks
- Core Bereavement Items Questionnaire @ 3 & 6 months
- Bereavement intensity shown to be increased when unprepared for the death, drawn out death, violent death and if the deceased appeared to suffer more than expected.
- Coping response improved from 3 to 6 months, along with acceptance.

Brain Death

- Death due to the irreversible cessation of brainstem function.
- When assessing for clinical diagnosis of brain death in a comatose patient, the following principles are essential:
 - establishing the cause of coma,
 - ascertaining irreversibility,
 - excluding major confounders and accurately testing all possible brainstem reflexes



Brain Death

Patient must first meet criteria:

Proof that the condition of the patient is due to irreversible structural brain damage.

- Eg: Guillian Barre can cause reversible loss of brain stem functioning.
- If any doubt about primary diagnosis- cannot diagnosis brain death clinically

Exclusion of reversible causes of coma

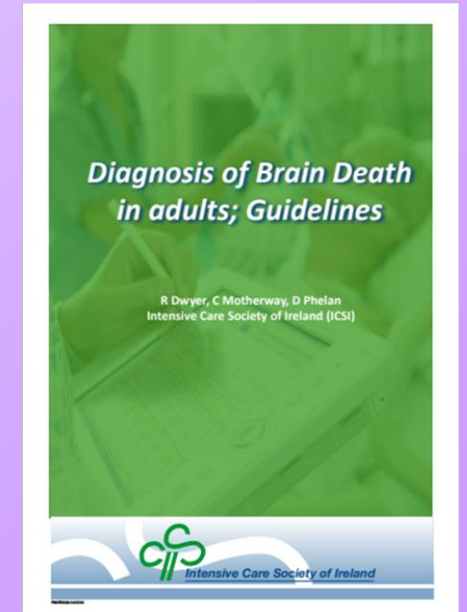
- Toxins, poisons, sedatives
- Metabolic disturbances
- Severe hypotension
- Hypothermia

Formal brain stem testing

Can commence once patient meets criteria.

Pupils fixed and absence of cranial reflexes for at least 4 hrs.

- 1) No motor response
- 2) No pupillary response to light
- 3) Corneal reflex
- 4) Oculovestibular reflex
- 5) Oculocephalic reflex (Dolls eye phenomenon)
- 6) Pharyngeal (gag) reflex
- 7) Laryngeal (cough) reflex
- 8) Apnoea test



Formal brain stem testing

- 2 sets
- One consultant, one fully registered for 5 years and working in acute care with experience of testing.
- Family informed after initial test, prepared for expected finding.
 - Time to consider organ donation
- Time of death after second set.
- Usually initial injury may be reportable to coroner – permission must be given for organ donation to occur.

Organ Donation and Transplant Ireland

Responsible for:

- Delivery of the National Organ Procurement Service for Ireland
- Provide the strategic framework for Organ Donation and Transplantation.
- Ensure best use of resources and the best possible outcomes.
- Compliance with standards of quality and safety of human organs intended for transplantation
- Data collection for publication annually
- Living donor register



ODTI

- Meet and support family
- Lifestyle questionnaire
- Body mapping
- Liase with all teams involved
- Support and guide staff- ensuring all bloods/CXR/ECHO/ECG taken
- Stay with the patient throughout theatre
- Provide education & training
- Follow up with families



Care After Death

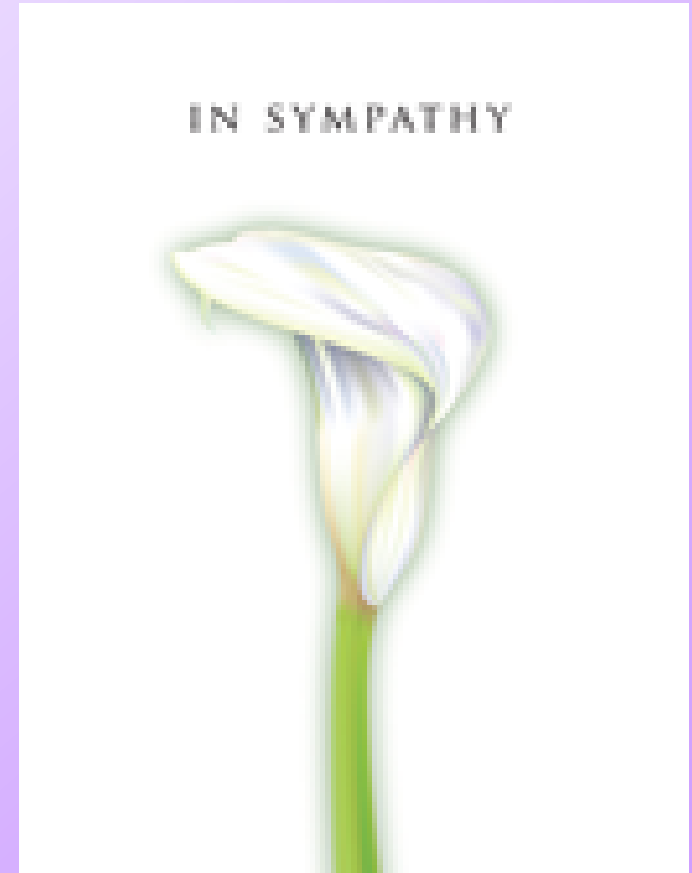


Keep sakes



End of Life Care Group

- Complete “Final Journeys” Training
- Focus on EoL Care
- Keep resources up-to-date
- Support staff
- Mindful of the needs of family
- Remembrance week – focus week
- Hospital Service
- Bereavement Cards
- Book of condolence



Guidelines

End-of-life care in the ICU

Nursing care



**HospiceFriendly
HOSPITALS**

Putting Hospice Principles into Hospital Practice.



The Irish
**Hospice
Foundation**

Striving for the
best care at end
of life for all

hospicefoundation.ie



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Thank you for listening

