Improving Cancer Pain Relief through a dedicated, Hospice-based Interventional Pain Service.

John Browne, Consultant Pain Specialist, Catherine McGonagle, Frances O’Driscoll, Pain Relief Nurse Specialists, Cork University Hospital, Marymount University Hospice
The effective management of cancer-related pain is a top priority for patients, families and health care professionals.

Between 85-90% of patients with advanced cancer can have their pain well controlled with analgesic drugs and adjuvants.

However, in 10-15% of cancer patients, systemic analgesics fail to provide adequate control of cancer pain.

Up to 80% of these patients may benefit from interventional techniques.

ESMO Clinical Practice Guidelines 2012.
However...

- Evidence suggests the gross under-utilization of interventional pain management techniques in the treatment of cancer pain. This may be multifactorial in origin but typically results from poor interdisciplinary communication (i.e. palliative care, oncology and pain medicine), ad hoc referral arrangements and a lack of integrated services (Linklater et al 2002)

The History....

Traditionally in Cork very strong links between Palliative Medicine/Medical & Radiation Oncology/Pain Medicine.

Significant numbers of patients until recently treated in acute hospital setting.

However this required:

- Transfer out of hospice environment.
- Outpatient oncology patients sharing facilities with non-oncology outpatients.

This was not always appropriate for the patient population, nor was it efficient.
New hospice officially opened in 2011

After multidisciplinary collaboration between Palliative Care/Medical & Radiation Oncology/Pain Medicine it was decided that a dedicated Interventional Pain Management Unit would be established in the new Marymount Hospice.

Comprising:

- OPD suite
- Procedure room with Xray & Ultrasound facilities.
- 3 bedded recovery.
Development continued...

Staffing required:
- Pain Specialist Consultant & NCHD
- CNS Pain Relief
- 3 Staff nurses
- Secretarial support

Funding:
- Proposal to HSE highlighting clinical need, benefits, costing.
- Marymount a registered charity, private funding also sought.
Audit of first years’ Activity...

• The retrospective review examined the first year's activity of the interventional pain service (June 2014-June 2015).

• 175 patients (range 28 - 89), 102 female : 73 male

• Palliative Care accounted for the majority of referrals (44%) Medical Oncology 36% and Breast surgery 9%

• Breast disease comprised the largest percentage of cancers referred to the service @ 58%

• Lumbar and thoracic metastatic disease (53% & 26% respectively ) were the main indications.

• Epidural blocks ( caudal, thoracic and lumbar ) accounted for 39% of all interventions.
Length of time from Review to Intervention.

- < 1 Week: 5.00%
- 1 week: 25.00%
- 2 weeks: 45.00%
- > 2 weeks: 25.00%
Fig 1  Source of Referrals

- Palliative Care: 44%
- Med. Onc.: 36%
- Breast Surgery: 9%
- Rad. Onc.: 6%
- Others: 5%

Legend:
- Blue: Palliative Care
- Green: Breast Surgery
- Purple: Rad. Onc.
- Cyan: Others.
Fig 2  Types of Cancers.

Breast
Lung
Rectal
Cervical
Bladder & Prostate
Others.
82% of patients had an intervention within two weeks of first review. Delays typically occurred only if patients had commenced antibiotics, issues with anticoagulants.

Patients reported good or very good relief of pain in over 80% of cases.
175 interventions performed per year in the Cork / Kerry area vs about 1000 done in Britain
This purpose-built self-contained hospice-based Interventional Pain Management Unit is unique in Europe, providing rapid access to patients suffering from cancer pain.
Joan – a young 71yr old widow and ballroom dancer from Kerry.

Cares for dependent siblings.

2000 – Breast ca - WLE and ANC followed by Chemo and Rx.

20012 - Supraclavicular node excised & biopsed imaging and followup...

2015 - Mass brachial plexus - limited Rx

2016 – Pain numbness unable to tolerate opioids highly sensitive
Case History

- Direct referral from CNS in Kerry for pain consultation.
- Brachial plexus blocked
- Reviewed in clinic last week.
- No pain no opioids back dancing!
75 y.o. man. Referred from Medical Oncology MUH.
Inoperable pancreatic ca at time of diagnosis.
Palliative chemotherapy ongoing.
Severe low back pain. MRI – degenerative changes.
Referred to Pain Management Service.
Diagnostic Facet Joint Injections Feb 2016.
Reviewed in OPD 8/52 later.
75% relief of symptoms. Returned to farming!
Facilitated reduction in p.o. analgesia.

Previous system not effective or efficient.

This integrated service resulted from a collaborative approach between Palliative Care, Oncology and Pain Medicine in response to patient need.

Present system is cost effective & efficient from both humanitarian and economic perspectives, a unique facility providing rapid access to interventional pain management techniques.

Model of integrated care undoubtedly to be replicated elsewhere.