A very practical approach to translating the evidence

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Outline

• Evidence and Practice
• CareSearch/Palliative Care
• More than webpages: What Lies Beneath
• Exemplar Resources
  – Clinical Evidence
  – CareSearch Hubs
  – Search Filters
  – Research Data Management System
• Use and Evaluation
Evidence and Practice
Expectations of clinicians

• Changing health environment
• Population health
• Best practice/ EBM/Research evidence
• Multidisciplinary approaches
• Care coordination/continuity of care
• Currency of practice
Issues

• Finding the evidence
• Managing the evidence
• Building the evidence
• Applying the evidence
CareSearch/Palliative Care
About Palliative Care

• Cure is not the goal of care
• Referral based, multidisciplinary, comorbidity
• Care provided in many settings
  – Many health professionals
  – Family carer
• Patient and family as unit of care
• Expanding, diffuse knowledge base
Nature of the evidence base

- Multiple databases
  - Unique contribution from Medline, CINAHL, PsycINFO and Embase

- Size of literature base/Number of journals
  - 56,000 palliative articles in Ovid Medline alone
  - In 2005 - 6,983 citations in 1,985 journals (or 19 per day).

- Searching for palliative is complex
  - Indexing is not precise
    - 9 MeSH terms and 3 textwords retrieved only 45.4% of the palliative care literature
  - Not only in specialist journals
    - 4% of general biomedical journal articles relevant to palliative care

- “Missing” literature
  - Conference conversion rate low
    - Approximately 16% compared to average of 45%
Palliative Care Context

• Population health considerations
  – Ageing population
  – Specific needs groups
  – Malignant, non-malignant

• Policy Drivers
  – Health reform agenda
  – National Palliative Care Strategies (1 & 2)
  – National Palliative Care Program (2000-2010)
  – Senate report into palliative care in Australia
  – Living Longer, Living Better

• Models of care delivery
Background to CareSearch

- Funded by Department of Health and Ageing since 2006
- Purpose
  - *provide a one stop shop of information and practical resources that serves the needs of all providing palliative care or affected by palliative care .....supporting the development of evidence, disseminating information that will support the translation of this evidence into practice and prevent duplication of effort around Australia.*
- Governance
  - Managed by Flinders University (Palliative and Supportive Services)
  - Knowledge Network Management Group
  - National Advisory Group
- Framing factors
  - For those providing palliative care (eg specialist services, GPs) and for those affected by palliative care (eg patients, carers,)
  - Relationship to the evidence and use of knowledge
  - Online
RESEARCH CAN IMPROVE OUTCOMES FOR MY PATIENTS.  FIND OUT MORE >>
Living With Illness

When you have a serious illness there are things to consider. This could be far you or far those around you.

You may want to think about your quality of life. What is important now? Whether you continue to work, how things are likely to change and how you can prepare for them is important. There is information here that can help in making informed choices.

Topics in this section look at:

- Planning for the future
- Financial matters
- Continuing to work
- Changes over time
- Emotional challenges
- Communication
- Symptoms
- Complementary therapies
- Support Groups

Return to For Patients and Families home page

This page updated 27 February 2013
More than webpages: What lies beneath
Knowledge Translation

• Knowledge to Action (KTA)\(^1\): Project framework
  – Systematic approach to evidence identification/assembly
  – Contextualisation
  – Barrier analysis
  – Evaluation

• Research processes

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CareSearch: Project and Research Studies by KTA element
Developing functionalities

• Develop functions and resources:
  – User needs
  – Evidence for formats, processes

• Facilitate knowledge translation
  – Relationship to the evidence
  – Relationship to the context
Exemplar Resources: Clinical Evidence
Clinical Evidence

• Topics with user community:
  – Symptoms, ACP, Diseases

• Syntheses of systematic or structured literature reviews

• Page structure
  – Key Messages
  – Implications for practice
  – Areas of contention
  – Facilitated access to the underlying evidence base:
    References, PubMed Searches
Dyspnoea

Dyspnoea (shortness of breath) is described as an uncomfortable awareness of breathing. [1] It is a subjective symptom which may not correlate with measurable physical abnormalities such as hypoxia. Treating the dominant cause of breathlessness, including the contributing co-morbidities, is likely to be most effective, but is not always possible.

Shortness of breath becomes more frequent in patients as their disease progresses; [2] it is associated with a poorer prognosis, [3] and is usually multifactorial in patients with advanced disease.

What is known

Evidence supports the use of either oral or parenteral opioids for relieving the symptom of dyspnoea. There is no evidence to support the use of nebulised opioids, however. [4]

A recent meta-analysis has shown that oxygen does not improve symptoms of dyspnoea in cancer patients who are mildly or non-hypoxaemic, although there may be a sub-population who do experience benefit. [5-6] A systematic review found no strong evidence for the benefit of oxygen in patients with dyspnoea and advanced disease from any cause, although the numbers studied were very small. [7]

The use of nebulised frusemide for dyspnoea has been investigated. A recent systematic review suggests it is a promising approach, although the included studies were small and diverse. [8]

If drainage of a malignant pleural effusion is required and is clinically appropriate, evidence supports the effectiveness of thoracoscopic talc pleurodesis. [9]

Research from small trials supports non-pharmacological interventions including general support, breathing re-training, activity planning and adaptation strategies, counselling and relaxation. [1, 10] These are complex interventions and it is not clear which components in the package may be most effective. A recent Cochrane review has not identified strong evidence to support these interventions, however, most studies were not done in a palliative care population and were small. [11] Nurse or physiotherapist-led interventions including breathlessness clinics may improve management of dyspnoea in palliative care patients with lung cancer. [12] For Chronic Obstructive Pulmonary Disease (COPD) patients who are able to participate in pulmonary rehabilitation, there is evidence of a clinically significant benefit in terms of dyspnoea, fatigue and wellbeing. [13]

Benzodiazepines are frequently prescribed for management of distress associated with dyspnoea, but have not been well studied. They were not of benefit in four out of five randomized controlled trials when used in COPD, [14] but numbers were small.
Exemplar Resources: Search Filters
Why a search filter?

• “Evidence based" search = known effectiveness

• Benefits
  – Saves time
  – Increases likelihood of quality retrievals
  – Removes individual search burden
  – Embeds technical expertise
  – Facilitates knowledge translation
Developing search filters

- Not an expert search, research based
- Informed by Expert Advisory Group
  - Functional utility
- Filter Development Process
  - Gold standard, Term identification, Strategy testing, Post hoc relevance
- PubMed applications
  - Harnessing the ease of the web, Open access, free to use, allows hyperlinking
PubMed: Palliative care filter

As easy as 1-2-3
Search Filters

- **Current Filters**
  - Palliative care
  - Heart failure
  - Lung cancer, NSCLC and SCLC
  - Primary health care
  - Residential aged care facilities
  - Dementia
  - Aboriginal and Torres Strait Islander health

- **In Development**
  - Bereavement
  - Sarcoma
  - Glaucoma
Exemplar Resources: Research Data Management System
Building the Evidence Base

Need to support palliative care research, particularly high quality evidence:

• Lack of research infrastructure
• Need for participation from multiple sites
• Experience and capacity
• Technical support
Part of Research Resources

- Conducting research in palliative care
- Grant and funding sources
- Research Studies Register
- Research Data Management System (RDMS)
- Professional Connect
About the RDMS

• System functions
  – Enables the online design of data collection forms and questionnaires; various styles, question formats
  – Allows for web-based and email-based form completion
  – Enables data entry from multiple sites with a single coordinating site
  – Provides for basic reporting of results with features such as percentages, graphs, and tables
  – Allows export of data to other programs such as Excel, Access or SPSS.

• Availability
  – Designed to support the palliative care community
  – Access requires formal agreement
CareSearch Website Feedback Survey

Information about you

1. What is your postcode?

2. How would you describe yourself?
   - Patient
   - Carer, family member or friend
   - General Public
   - Health Professional (Palliative Care)
   - Health Professional (not Palliative Care)
   - Researchers, academic, educator
   - Volunteer
   - Service Manager or Administrator
   - Policy Maker, Planner or Funder
   - Other, (please clarify below)
Exemplar Resources: CareSearch Hubs
Why a Hub?

- Organises evidence for use
- Consolidates relevant materials for a particular group
- Reduces burden for the individual clinician associated with identifying, retrieving, sorting and appraising
- Provides home/entry point
- Recognises engagement of particular group in palliative care/EOL
CareSearch Hubs

- GP Hub
- Nurses Hub
- Residential Aged Care Hub
- Allied Health Hub
- Patients, Carers, Families
Evaluation and Use
Usage

> 60,000 visits per month
> Over 400,000 page views per month
> Registered for newsletters > 4,500
> Engagement of the clinical community
> Project integration with other national activities in palliative care (e.g. PaCCSC, NSAP)
> Relationships with research/project teams around online applications of findings and research work
> 21 evaluation projects completed (formative, summative and process)
Assessing Value: RDMS

• National and international users
  – 20 organisational agreements, 200 surveys and 500 registered users
  – Enables data collection for national standards assessment

• RDMS used for PaCCSC
  – First of RCT results published (Ketamine for pain)

• 2010 Evaluation Survey (Users and Stakeholders)
Assessing value: PubMed searches

• Usage
  – Each PCF PubMed search is used between 3 and 20 times per day

• PCF Effectiveness Study
  – Clinician searches are basic
  – PCF outperforms clinicians searches
  – PubMed searches identified literature the health professionals hadn’t found
Possibilities for Ophthalmalmology
Considerations

• Structuring your knowledge base
  – Who are your knowledge users
  – What already exists
  – Role of evidence in practice
• What would add value?
  – Best practice summaries
  – Education and training resources
  – RDMS
  – Search solutions
  – Information for patient and families
• How will users learn about it?
CareSearch in conclusion

• Not just a website, an online knowledge resource

• Activity is driven by knowledge translation framework

• Evidence is the central construct

• Research sits alongside the project
CareSearch would like to thank the many people who contribute their time and expertise to the project including members of the National Advisory Group and the Knowledge Network Management Group.

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www.caresearch.com.au