

# Rural Palliative Care Resource Kit



## *Utilising electronic records and electronic communication for the purpose of Rural Palliative Care*

**April 2007**

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## Introduction

This document has been developed for the Rural Palliative Care Resource Kit to provide information to Rural Palliative Care Programs across the Network with an overview of options relating to the development of electronic records and electronic communications for the purpose of Palliative Care programs.

It discusses a range of options currently available for electronic communication for Palliative Care including:

- software solutions for the management of patient data for palliative care programs
- secure messaging options
- electronic referrals and discharge summaries.

For the purpose of this document "electronic records and electronic communication" refers to those systems that utilise a computer and computer software for the purpose of storing and communicating clinical information.

## Benefits of electronic communication

There are a range of benefits for choosing an electronic system when developing a Palliative Care Program for your Division/Network. Some of the benefits of electronic systems include:

- **Greater efficiency** – utilising an electronic system can increase efficiency with respect to a range of tasks including; faxing, filing, shredding, printing, and scanning;
- **Security of data** – With electronic systems there is better security of patient data including the implementation of 'access levels' to ensure that only people who are meant to see clinical information can see the information;
- **Smarter Data** – unlike paper documents, with electronic systems information and data can be extracted and analysed quicker;
- **Message tracking and audit trails** – Secure electronic communication solutions and software packages can track the progress of a consultation or message through the various stages, levels and individuals. This can be very important when you require an audit trail;
- **Practice Incentive Payments for IM/IT (for GPs)** – there are financial incentives provided for General Practitioners using electronic communication tools. To find out more go to:  
[http://www.medicare.gov.au/providers/incentives\\_allowances/pip.shtm](http://www.medicare.gov.au/providers/incentives_allowances/pip.shtm)
- **Less paper** – using less paper in the office has positive environmental outcomes;
- **Better patient care** - It is believed that electronic systems will ultimately result in better patient care due to health providers spending less time processing paper and more time focusing on the care of the patient.

Despite the many benefits of electronic communication there are a range of points that need to be considered before embarking on an electronic system, these factors are considered in the next sections of this document.

## Considerations for choosing a solution

When developing an electronic solution for your Palliative Care Program, there are a range of factors that should be considered before the system is implemented to ensure that the system meets your Program's needs, your organisation's needs and the needs of the organisations you would like to share the information with.

### Level of Computerisation and available connectivity

Before electing to implement an electronic system for the purpose of your Palliative Care program it is important to ensure that the parties you would like to communicate with have an appropriate level of computerisation.

Personal Computers (PCs) should be accessible by all the parties you need to communicate with and should meet a minimum specification level. A guide for *minimum* specifications for PCs is as follows:

- Pentium IV 2 Ghz or above
- 256 Mb of Ram (although 512 Mb is preferable)
- 10 Gb Hard-drive (or greater)
- Quality 100 Mbps network card
- Windows XP Pro or Windows 2000 Pro
- Windows 2000 or 2003 (server)

Related to this is the need for connectivity to the sites/individuals you need to communicate with. With respect to connectivity, broadband via ADSL, wireless or satellite is preferable as it enables quicker and more reliable data transfer.

Talk to all your stakeholders and ensure they have adequate access to computers and connectivity so they can receive, send and view information for the purpose of your Palliative Care Program.

### Objectives of the system

Once you have determined that the relevant parties do have access to computers and connectivity, the next matter that should be considered is what the objectives of the electronic system are.

Some of questions your Division might like to ask include:

- Who are the parties that will be accessing the system?
- What are the requirements of the parties who are accessing the system?

- Is point to point messaging adequate (ie electronic referrals) or is a fully integrated system required

Develop a 'wish list' for the system you would like to implement before going out to the market so you have a clear idea of what your requirements for the electronic solution are.

## **Consult with your stakeholders**

To ensure that the objectives of your Program are met it is essential that your local stakeholders are consulted with. This will ensure that your objectives of your electronic system are consistent with all your stakeholders. Based on the feedback from your stakeholders the objectives and 'wish list' for your system may need to be modified.

Consulting with all your stakeholders will also ensure that the system you propose to implement is not "re-inventing the wheel" and that you are meeting the data collection requirements and conforming to required standards and needs of the parties you want to share information with.

The relevant stakeholders for Palliative Care for each state are outlined in a separate section of this Palliative Care Resource Kit so this would be a good place to start.

## **Cost implications including sustainability**

When setting up electronic systems an important factor to consider is the ongoing sustainability of system.

There are a range of ongoing costs associated with the implementation of computer systems. Some of these costs include the following:

- IT Support Costs
- Ongoing Annual Software Costs/Fees
- Training costs
- Hardware replacement costs (e.g. for PCs as they become outdated and redundant).

Before purchasing expensive software packages it is important to consider how these products are going to be supported and training provided on an ongoing basis so that the solution is sustainable in the long term.

## **Linking with other programs/systems**

Whilst it is important to consult with your stakeholders for your Palliative Care Program it can also be useful to talk to other program areas as well, particularly within your Division/Network of General Practice.

If other electronic communication processes have already been developed for other programs that your Division/Network implements you may be able to utilise these systems.

For example your Division/Network may already have templates for electronic referral forms that have been developed for other program areas and you may be able to adapt/modify these for the purpose of your Palliative Care Program.

An important person for you to talk to with respect to this point is the IM/IT Officer at your Division/Network (if your organisation has one) and other Program staff. The General Practice Network is also a valuable source of information.

## Utilise standards

When implementing electronic systems it is important that standards are adhered to so that systems can be interoperable and government requirements are met.

Standards and guidelines developed by the following organisation and collaboration and should be considered when developing electronic systems for the purpose of Palliative Care Programs:

- The National e-Health Transition Authority (NeTHA)
- Palliative Care Outcomes Collaboration (PCOC)

### **National e-Health Transition Authority**

The National e-Health Transition Authority Ltd is a not for profit company established by the Australian, State and Territory governments to develop national standards for electronically collecting and securely exchanging health information.

When developing any electronic system it is important that NeTHA standards are incorporated into the system (as they become available) as this will ensure systems developed are future proof and interoperable.

For example when choosing a software product a good question to ask is whether or not it will incorporate NeTHA standards.

For up to date information on NeTHA standards go to the NeTHA website ([www.netha.gov.au](http://www.netha.gov.au)).

### **Palliative Care Outcomes Collaboration (PCOC)**

The Palliative Care Outcomes Collaboration (PCOC) is a voluntary quality initiative to assist palliative care service providers to improve practice and meet the “standards for providing quality palliative care for all Australians”.

PCOC works with palliative care service providers with respect to a range of activities including:

- Developing consistency in the collection of data
- Provide evidence through the collection and analysis of data
- Assist with quality and standards reporting
- Provide a benchmarking service
- Promote and support palliative care research
- PCOC is currently working on developing a minimum data set for Palliative Care Programs however at the time of writing this article this minimum data set was not yet definitive.
- When developing your electronic system for the purpose your Palliative Care Program it would be worthwhile to liaise with PCOC to ensure that the data collected through the software programs meet PCOC requirements. To find out more go to the PCOC website ([http://chsd.uow.edu.au/pcoc/about\\_pcoc.html](http://chsd.uow.edu.au/pcoc/about_pcoc.html))

## **Patient Consent, Confidentiality and Data Security**

As with paper records, it is essential that when communicating electronically that data security, patient confidentiality and patient consent are addressed when you are considering sharing information electronically.

Privacy of consumer health information is an important issue for consumers and providers. The applicable law in Australia is highly complex across Australian jurisdictions and therefore it is important to consult with your State government to ensure that Privacy laws are being adhered to when you are developing your program.

### **Patient Consent and Confidentiality**

The consumer health information obtained by a provider is subject to an obligation of confidentiality between the provider and the consumer as well as being subject to privacy law obligations.

If a provider intends to “share” information with other members of the consumers care team it is important that the provider obtain the consent from the consumer to do this.

This consent can be obtained in the form of a participation agreement from the consumer. The participation agreement can also limit the authorised users that can access the consumer’s information.

### **Data quality and security**

Privacy laws require organisations to take reasonable steps to ensure that personal information the organisation collects uses or discloses is accurate, complete and up to date.

When transferring information electronically, it is crucial to maintain the privacy of health information of consumers. This builds confidence and ensures the integrity of the data and its reliability for providers.

When sharing information electronically for the purpose of palliative care programs it is essential to ensure that the data integrity is maintained and information is transmitted securely using encryption technologies that are discussed within this document.

## Palliative Care Software

One of the quickest ways to implement an electronic system for the purpose of Palliative Care is to purchase software that has been developed specifically for Palliative Care. There are a few products currently available on the Australian market the most frequently utilised ones are outlined in this section.

Investing in software can be an expensive exercise so it is important to ensure that the solution you choose meets your areas standards and requirements so do your research and consult with other Divisions/Networks before purchasing a particular product.

### PalCare

(Note: Information contained within this section has been obtained from the PalCare website found at <http://www.eclinic.com.au/eclinic/palCare.cfm>)

PalCare, developed by eClinic Pty Ltd, is a secure fully managed patient information management system and service that integrates acute and community care information into a single view of the patient, enabling health and support care providers to optimise the quality of care for their patient at the time and point of care.

### Management & Maintenance

The PalCare system is web-based and fully hosted, supported and maintained at the eClinic data centre, eliminating the need for software, hardware, network infrastructure or dedicated system administration staff by the palliative care organisation.

### Summary of System Features

The PalCare System contains the following features:

- Patient details
- Personal Contacts
- Professional Carers
- Medications
- Equipment Management
- Care Plans
- Episodes of Care

- Diagnosis
- Symptom Assessment
- Referral Information
- Pain Summary
- Hospital Admissions
- Hospital Discharges
- Death
- Patient Summary Reports
- Extensive tools for care team resource management
- Detailed and live reporting in line with industry and regulatory requirements
- A stable scalable platform. eClinic currently supports more than half a million electronic health transactions per month.
- Secure access by health and community care providers from desktop or laptop computers or with internet access
- Inventory control of equipment allocated to patients is better managed.

### **Installation & Support**

- PalCare operates via eClinic's hosted secure servers.
- Existing electronic patient information from organisations can be migrated into PalCare.
- eClinic organises training for the organisation's staff in the use of the PalCare system.
- eClinic provides ongoing user support through its extended hours help-desk.
- A limited demonstration system is available at [demo.palcare.com.au](http://demo.palcare.com.au). A full demonstration can be obtained by contacting eClinic at the details below.

### **Cost**

To find out the cost of this software solution for your area it is best to contact the developers directly so that the quoted price is based on your requirements and number of services involved.

### **Contact Details**

If you would like to find out more about PalCare, contact eClinic as per the details below:

eClinic Pty Ltd

ABN 80 092 450 274

657 Nicholson Street

Carlton North

Victoria 3054

Australia

Phone: +61 3 9381 4567

Fax: + 3 9381 4657

Email: [info@palcare.com.au](mailto:info@palcare.com.au)

Web Site: [www.eclinic.com.au](http://www.eclinic.com.au)

## PalCIS (Palliative Care Information System)

(Note: Information contained within this section has been obtained from the PalCIS website found at <http://www.palcis.com/default.asp>)

PalCIS is a secure patient focused Palliative Care Information Systems designed for the use by teams of healthcare providers.

PalCIS comes in 2 versions, PalCis Original and PalCIS Phase. PalCIS Original is primarily used in Western Australia whilst PalCIS Phase has been developed for use throughout the rest of Australia.

### Summary of System Features

PalCIS contains the following features:

- Patient Demographic Details
- Patient Referral Details
- Monitoring of Palliative Phase of Care (Enhanced \*)
- Symptom Assessment Scales
- Modified Karnofsky Performance Scores
- AN-SNAP ADL and AAPC Scales
- Inpatient Admissions
- Emergency Department Attendances \*
- Outpatient Attendances
- Home Care Visits
- Consultations
- Global Service Provision
- Medications \*
- Chemotherapy \*
- Radiotherapy \*
- Clinical Observations \*
- Test Results \*
- (Nursing) Care Plans
- Integrated Case Notes
- Extensive Reporting Features
- Secure Data Transfer between sites

\* Available in PalCIS Phase Only

Both versions of PalCIS include an optional mobile client for the Palm Pilot/PDA which enables team members to securely view relevant information and record home visit details about their clients whilst on the road or out of the office.

## Cost

Information pertaining to the cost of purchasing the PalCIS software can be obtained from the PalCIS website ([http://www.palcis.com/vmc\\_pricing.asp](http://www.palcis.com/vmc_pricing.asp)).

## Contact details

If you would like to find out more about PalCIS, contact Virtual Medical Centre as per the details below:

Virtual Medical Centre  
Subiaco WA 6904  
+61 8 93880344  
+61 8 93880611  
info@palcis.com

## Secure messaging, electronic referrals and discharge summaries

While purchasing a Palliative Care software package is one way of communicating electronically for the purpose of Palliative Care there are alternatives for simple point to point communication between parties on the care team.

The following examples of simple point to point communication using electronic communication tools are outlined in this section:

- Email in conjunction with Public Key Infrastructure (PKI)
- Electronic referrals using Practice Management Software Templates
- Electronic Discharge Summaries
- Email and Health e-Signature Authority and Public Key Infrastructure

Email is fundamentally an insecure technology that should not be used for the transmission of any patient information unless it is used in conjunction with additional security measures such as a Public Key Infrastructure (PKI) individual Key (iKey).

Medicare Australia manages the distribution of PKI certificates (for both locations and individuals) through the Health e-Signature Authority (HeSA) (<http://www.hesa.com.au/index.html>).

PKI is a trusted framework adopted by Australian Government to provide authentication and confidentiality for online transactions through the use of digital keys and certificates. For the healthcare sector, PKI enables the transfer of sensitive medical information across the Internet, without compromising the individual's right to privacy.

PKI is specific to the health care professional and is used to transfer encrypted and/or digitally signed documents. This can be done within your email system using an iKey (individual certificate). Individual certificates provide authentication, confidentiality, integrity and do not allow the sender to later dispute that they sent the message.

With PKI you can send a file to someone and know he or she is the only one who can open it. You can also receive a file, confident it has been sent to you securely. In addition PKI also digitally signs a document which is useful for sending electronic referrals as it is a legal requirement that referrals are "signed".

For the purpose of Palliative Care Programs a simple electronic solution for communicating with other individuals in the patients care team regarding a patient without breaching a patient's privacy or confidentiality is to use email in conjunction with an iKey. Each participant on the individual's Care Team (GP, Palliative Care Specialists or Allied Health provider) could apply for a PKI iKey at no cost on the HeSA website at [www.hesa.com.au/index.html](http://www.hesa.com.au/index.html).

## Secure messaging Products

There are a range of products in the Australian Health Sector that enable messages to be transported securely from one point to another. Secure electronic communication products are essentially software programs that encrypt and decrypt electronic messages to prevent them being viewed by unauthorised third parties during transition.

Secure messaging products on the market include the following:

- HealthLink ([www.healthlink.net](http://www.healthlink.net))
- Argus ([www.argusconnect.com.au](http://www.argusconnect.com.au))
- CNS Health ([www.cnshealth.com.au](http://www.cnshealth.com.au))
- eClinic ([www.eclinic.com.au](http://www.eclinic.com.au))
- 2 Hippo ([www.2hippo.com](http://www.2hippo.com))
- LRSupport ([www.lrsupport.com.au](http://www.lrsupport.com.au))
- Medical Objects ([www.medicalobjects.com.au](http://www.medicalobjects.com.au))
- Promedicus ([www.promedicus.com.au](http://www.promedicus.com.au))

All these products can be used to send secure messages from one party to another for the purpose of Palliative Care including for the use of e-Referrals from a GP to a Palliative Care Specialist, and e-Discharge Summaries from a Hospital back to the patients GP.

The added benefit of utilising a secure messaging application for referral and Discharge Summaries is that the results/messages are directly imported into the GPs Practice Management Software which eliminates the need for scanning.

Many General Practices already have secure messaging solutions installed to facilitate the electronic retrieval of radiology and pathology results. These messaging systems can be modified for the purpose of electronic referrals for many Programs including Palliative Care.

When selecting a secure messaging product it is important that you consult with your area health provider and other health services in your region as different products are

currently being implemented in different areas and it pays to go with the solution that most people use in your region.

## **Standards for Messaging**

The secure messaging applications outlined above are generally able to send messages in two formats, either PIT (Pathology Information Transfer) format or HL7 (Health Level 7).

The National e-Health Transition Authority (NeTHA) have endorsed HL7 as the national standard messaging format as it is technically superior to the PIT format. Therefore, wherever possible Practices should attempt to receive all health related documents in HL7 format.

## **Electronic GP Referrals to Palliative Care Specialist or Allied Health Provider**

One option for electronic communication amongst the Care is email in conjunction with a PKI iKey (as outlined above). However there are alternatives to this solution which uses secure messaging products in conjunction with referral templates of forms.

The important thing to remember when sending a referral using a secure messaging product is that the person you are sending to will need to have a software product that can view the HL7 or PIT file. If they don't it is possible to send the referral form using the template from the GP's Practice Management Software via email with a PKI iKey.

An electronic referral form for the purpose of Palliative Care can be set up as a template in a GPs Practice Management Software. The benefit of having the template within the Practice Management Software is that the demographic details of the patient can be automatically populated from the software which limits the fields required for the General Practitioner to complete.

Included in this section of the Rural Palliative Resource Kit are some examples of templates that can be used for the purpose of electronic referrals to Palliative Care Specialists from GPs that have developed by other Divisions.

These templates can be modified for your purposes and imported into your GP's Practice Management Software.

Templates can also be developed for referrals to Allied Health Professionals for the purpose of Palliative Care using the same process.

### **Importing Templates into Practice Management Software**

Once you have developed or modified your Palliative Care Referral template, you will need to import the template into your GPs Practice Management Software.

Below are some instructions for importing templates into some common Practice Management Software Products:

### PractiX, Medical Director and Best Practice Templates - instructions

#### PractiX

- Open the word document that you have created.
- Click file and save as
- Search for your msp L:/Templates Folder
- Name the template and click 'save'

#### Then:

- Logon on to PractiX
- Click on Administration
- Open System Configuration on the + sign
- Open Templates on the + sign
- Double Click on the "Register Document Template"
- At the top click on the drop down box and select Letter/Document template
- Click on 'New' on the right hand side
- Click on 'Select'
- Find the template on the msp L:/
- Double click on it.
- Click on Edit Template
- Insert the Merge Fields where required.
- At the bottom click on Other Document
- Save and closed
- Medical Director
- Right click on document and select Save Target As...
- Select a location on hard drive (which you can find later) and save
- Then:
- Open Medical Director and then Open Letter Writer
- Go to File and then menu >
- Select Modify Template >
- Select Blank template
- Go to File >
- Select Import - locate downloaded file and click on Open
- File > Select Save as template - type in appropriate name and click on Save
- Best Practice
- Right click on link and select Save Target As...
- Select a location on hard drive (which you can find later) and save
- Then:
- Open a New Letter and from Templates menu select Import templates
- Locate downloaded file and open
- From File menu select Save as. Type in an appropriate Template name and click on Save

## Electronic Discharge Summaries

It is essential that when developing solutions for electronic discharge information it is necessary to work closely with your State or Territory Health Department so this is the best place to start with consultation for this type of electronic communication.

The secure messaging applications (outlined in section) can also be used to send electronic discharge summaries for Palliative Care patients from hospitals back to the referring GP.

While Discharge information can be sent back to the GP using email in conjunction with a PKI ikey it is better to utilise a system that incorporates a secure messaging application as the information can be imported directly into the GPs Practice Management Software and can be seen to immediately.

Many of the secure messaging applications have Programs that can be used to generate discharge information and forms and as mentioned in other places in this document it is important to do your research and investigate the alternatives on the market.

## Other useful resources

There are a range of useful resources that may assist with the implementation of electronic systems for the purpose of Palliative Care.

Some useful tools include:

- The General Practice Computer Group (GPCG) <http://www.gpcg.org.au/index.php> including the GPCG Resources  
[http://www.gpcg.org.au/index.php?option=com\\_content&task=section&id=6&Itemid=38](http://www.gpcg.org.au/index.php?option=com_content&task=section&id=6&Itemid=38)
- The Australian General Practice Network (AGPN) Information Management Document Library which can be found at:  
<http://www.adgp.com.au/site/index.cfm?module=DOCUMENTS&leca=64>
- Central Coast Palliative Care Services Networked Integrated Information Systems (NIIS)  
[http://www.archi.net.au/e-library/service/community/community\\_resources/cc\\_palliative\\_care\\_services](http://www.archi.net.au/e-library/service/community/community_resources/cc_palliative_care_services)
- National e-Health Transition Authority – for information regarding standards for electronic communication [www.nehta.gov.au/](http://www.nehta.gov.au/)
- Palliative Care Outcomes Collaboration - for information relating to standards for providing Quality Palliative Care including information on data collection  
[http://chsd.uow.edu.au/pcoc/about\\_pcoc.html](http://chsd.uow.edu.au/pcoc/about_pcoc.html)

(Please Note: The information contained within this document was up to date and correct to the best of the author's knowledge at the time that it was written.)