



COT/ BAOT Briefings

Integrated Care Pathways

Revised Date: November 2005
Lead Group: Practice
Review Date: November 2007
Country Relevance: UK wide

Introduction

This COT/ BAOT Briefing will provide some background information on integrated care pathways (ICPs) and a broad guide to their development. It will also signpost some resources that readers or developers may find useful.

Background

From as early as the 1950's critical path and process mapping methodology was used in industry, particularly in the field of engineering. In the 1980's, clinicians in the USA began to develop a pathway tool, re-defining the delivery of care and attempting to identify measurable outcomes. They were focusing on the service user rather than the system, but needed to demonstrate efficient processes in order to fulfil the requirements of the insurance industry.

In the early 1990's the National Health Service (NHS) in the UK funded a service user-focused initiative to support organisational change. This resulted in the investigation and development of concepts such as pathways. In 1990 a team from the UK visited the USA to investigate the use of these pathways, or 'Anticipated Recovery Pathways' as they were then called.

By 1994, the Anticipated Recovery Pathway had evolved into the Integrated Care Pathway in the UK. ICPs were clinician-led and driven, focussing on service users and best practice. They are now in world-wide use, extending into the social and community care sectors.

The following are some definitions of integrated care pathways:

- A multidisciplinary outline of anticipated care, placed in an appropriate timeframe, to help a patient with a specific condition or set of symptoms move progressively through a clinical experience to positive outcomes.
(Middleton et al 2003, p1)
- A multidisciplinary plan of care which is evidence based, incorporating national and local guidelines. It forms the single clinical record of care for all Health Professions involved in the care and treatment of the patient. The ICP is not cast in stone and should be used as a guideline to ensure that the most appropriate care is provided. It should not be followed blindly and clinical judgement should be used at all times.
(NHS Forth Valley 2000)
- Determining locally agreed, multidisciplinary practice based on guidelines and evidence where available for a specific patient group. It forms part of the clinical record, documents the care given and facilitates the evaluation of outcomes for continuous quality improvement.
(National Pathways Association 1998, in: Naylor and Czumaj 2002)



This last definition states that integrated care pathways form part of the system of continually improving practice. By defining the expected pathway, the outcomes and the interventions; the variations, or differences to these expectations, can be noted and measured. This information allows changes and improvements to be made to practice, to improve the quality and outcomes of care.

Many explanations of ICPs use the following list; that an ICP aims to have:

- the right people
- doing the right thing
- in the right order
- at the right time
- in the right place
- to the right standard
- with the right outcome.

All the actual care provided should reflect the service user's needs and experiences and should be measured against the planned care.

Critical Indicators

In order to measure the effectiveness and efficiency of the care given, there need to be key indicators that are constantly measured and monitored. This will also inform you of the impact of implementing the integrated care pathway.

The critical indicators are the outcomes from interventions that make the biggest difference to the quality, time or resources used to help the patient recover from an illness, condition or procedure. For an occupational therapist this could be a particular intervention that is always provided' as it is vital to the progress of the patient; or it may be the use of an assessment tool that can monitor change over time or indicate future intervention for the patient.

These critical indicators become building blocks for the integrated care pathway. The data gathered from these interventions or outcomes can be used to show change and variations that occur as patients move along the pathway.

Variations/variants

There will always be variations or variants to an ICP. This is when an individual user does not follow the expected pathway. The causes of variations can be recorded and monitored over time, allowing the ICP to be altered to include or manage some of the most common reasons, for example, infection. Monitoring may give light to particular events or actions that give rise to variants, for example, poor hygiene in a particular area may lead to infection. These events or actions can then be changed or removed. Variations should always lead to some kind of action.

What is the purpose of an ICP?

Integrated care pathways are one of many tools coming under the umbrella term of structured care methodologies. These include everything from patient education material to guidelines and protocols. Integrated care pathways can combine many of these structured elements, with the following aims:

- to improve the co-ordination and consistency of patient care;
- to formalise and streamline a pattern of care, so reducing unnecessary waste or variance;
- to provide a mechanism for handling complexities;
- to enhance the appropriateness of healthcare services;
- to manage and reduce clinical risk;



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- to maintain and/or improve the quality of care provided;
 - to establish and enable the application of best practice;
 - to enhance multi-disciplinary information and communication;
 - to transfer knowledge;
 - to empower patients and clinicians;
 - to enable patient involvement in the active care process;
 - to enable the service to become more outcome oriented and actively managed;
 - to create realistic expectations regarding patient care processes and anticipated outcomes; and
 - to enable immediate audit of the care processes involved.

Effectiveness/ Cost

ICPs can give valuable data allowing the clinical and cost effectiveness of a process to be evaluated. Aspects within the process can then be changed and monitored, aiming for improved efficiency without reducing effectiveness, e.g. the length of stay in a hospital may be reduced, thereby reducing cost, but clinical outcome remains the same or is improved.

Developing an integrated care pathway - step by step:

- **Form a multi professional project group** involving the practitioners that will be using the care pathway. You may also consider including non-practitioner staff who nevertheless play a role within the patient's care e.g. administrators, porters. You may also wish to include service users and carers in this group or in a consultancy role, as they are the focus of the care being given. Changes and developments to meet user preference or choice may be possible, without compromising clinical care and outcomes.

Identify the stages in the development of the pathway, agree a project plan and a timetable. You may also wish to allocate areas of responsibility.

- **Obtain all the information** that may be of use in defining your care pathway. This could include:
 - user views on the service – satisfaction surveys, complaints, user experience;
 - risk management information – clinical incidents/ near miss reports;
 - audit information;
 - evidence/ national, professional or local guidelines, National Service Frameworks published for the topic;
 - appropriate legislation relating to the client group/ procedures involved;
 - local activity and access information e.g. waiting times, length of stay; and
 - example care pathways for the client group.
- **Begin with the end in mind** by defining the objectives of the pathway – what are the goals for the service that is being provided? This will help you to scope the pathway, defining clearly the client group, the beginning and end points and any inclusion and exclusion criteria.
- **Build a process map** using the critical indicators to mark out the key steps within the pathway. This is a picture of the plan of care.

The critical indicators will help to define the sequence of steps and activities performed during delivery of care and who is responsible for them. These are the points at which you can measure the progress of the user and their adherence to the pathway.



The map needs to recognise the relationships between individual practitioners/ departments involved, for example points of communication, referral or information provision.

Process mapping will highlight potential problem areas and opportunities for improvement in practice. Ideas for improvements can be built into the new care pathway as it develops.

Process mapping can be done in two stages. The first stage is to map the process as it currently is. When critically appraised it is possible to highlight where the difficulties occur, using any information from complaints, adverse incidents etc. It is also possible to look at the stages involved in the user's care, the time taken, where blockages or hold-ups occur etc.

A second map can then be developed that defines an improved, but realistic care pathway. It will identify the changes that need to be made in terms of streamlining, improving access to services, communication etc. Any possible changes that will need to be made in roles or responsibilities will need to be negotiated and accepted. It is vital that the proposed pathway is agreed and owned by all participants.

- **Design a care pathway document.** An ICP is more than the document alone, although the document is the tool. The documentation needs to be clear, simple and easy to use and where possible consistent with the style of other care pathways used locally.

The document is developed from the complete process map, drawing out and identifying key elements:

- manageable steps within an appropriate time frame;
- decision points within the process and assessment tools to be used. This may include steps to be taken to manage common variations from the expected, or known risks, eg, infection;
- the investigations and interventions to be performed, and who is the most appropriate professional to perform them;
- criteria for referral to other professions and agencies;
- milestones and outcome measures, and any guidelines or protocols to be included;
- monitoring arrangements; and
- the actions necessary within the pathway should be prompted by the documentation.

The documentation should take into consideration the requirements for any professional standards for record keeping, especially if no other record is going to be kept. In 2005 a set of criteria were published that identify essential components of clinical pathways. These criteria may enable developers to design a pathway template, to support the creation and review of their own pathway. This work was published as Mallock N, Braithwaite J (2005) A template for clinical pathway design based on international evidence. *Clinical Governance Bulletin* 5 (5) 2-4.

- **Train staff.** In order to be successful it is vital that all staff involved in giving care are informed and trained and are committed to use the ICP fully. Involvement of representatives of all staff groups in the development of the ICP will help in the ownership and sponsorship of the tool when implemented.

It is also important that the management of the agency/ agencies providing the care fully sponsor the ICP. There must be agreement to enable the potential changes to practice, commitment to training etc. Some changes may be minor and can be introduced quickly,



others may be more major and may involve the redesign of work processes, responsibilities or capacity.

- **Test or pilot the pathway.** The ICP must be piloted to see if it is practicable and if it delivers the appropriate care and the planned improvements. Compliance needs to be monitored and the views of staff collected. A baseline review can be done. This is a comparison of the data collected using the pathway and the data collected before the introduction of the pathway, giving an indication of the impact that the pathway has had.

Once amended and finalised the ICP may need to be approved by the appropriate board or committee within the organisation, to ensure that it meets requirements and is supported by senior management.

- **Maintain the pathway.** Any ICP will need regular reviewing in order to update the content with any new evidence, practice, procedure, guidance etc. It is also important that the information gathered from the critical indicators of the ICP is monitored by the professional group involved, to enable them to change their practice if necessary, in order to give the best outcomes for the patients and the services.

Electronic pathways

Electronic ICPs are computer-based systems that replace the paper record of the ICP, with many of the required activities or responses automatically prompted, providing many of the routine clinical and administrative documents. Electronic ICPS can link with other current systems, if in place, e.g. electronic prescribing. As all the data is stored electronically the analysis and evaluation is comparatively quick and easy. If the electronic care pathway is replacing written care records, it is important that they are flexible enough to allow occupational therapists to insert or attach assessments and reports that are part of the care record for the service user.

ICP Resources

- Journal of Integrated Care Pathways
www.rsm.ac.uk/pub/jicp.htm (Accessed 23/11/2005)
This journal explores a wide range of issues relating to ICPs, including implementation, evaluation and strategic issues such as informatics, risk management and quality. The journal contains case studies of ICP programmes, original research articles, debate and commentary, book reviews and conference reports. It will be of interest to those involved at all levels in the health care industry including clinicians, nurses, therapists, managers, purchasers, project managers, and others.
- National Electronic Library for Health, Protocols and care pathways information and database.
<http://libraries.nelh.nhs.uk/pathways/> (Accessed 23/11/2005)
- Integrated Care Pathway Users, Scotland (ICPUS)
ICPUS is an established network of NHS staff from all over Scotland, who use integrated care pathways in many different clinical areas. They facilitate support and training for other interested NHS staff. ICPUS aim to be aware of what ICP's have been or are being developed in Scotland and the UK, and be a point of contact for help with care pathways.
<http://www.icpus.ukprofessionals.com/> (Accessed 23/11/2005)



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www.show.scot.nhs.uk/nhsfv/clineff/icp/ICPs.htm (Accessed 23/11/2005)

Venture Training and Consulting Website: www.venturetc.com/know_how2.asp (Accessed 23/11/2005)