#### TOWARDS AN INTEGRATED PHARMACEUTICAL CARE RECORD

Report of a PCNE workshop, held in Manchester, 23-26 March 2011

**Audience:** profession (around Europe); patients; other HCP's; stakeholders.

**Background:** documentation of pharmaceutical care is not widely undertaken. It is tended to develop in isolated pockets to support local practice development initiatives. It is clear from review of these initiatives that they are areas of overlap that suggest that a standardized record should be feasible and developed.

Before any such standardized record can be developed, it needs to be recognized that the profession and allied professions will need to undergo a culture change to accept and adopt an integrated pharmaceutical care record. It will also need to understand and address individuals concerns and anxieties.

Any development must follow a bottom-up approach to insure that it meets local needs and front-line staff needs.

The development of a record will be key to supporting the profession in moving forward. The profession will need to adapt to the changing health care environment, the introduction of technology and the current economic climate. The development of electronic health care records creates a specific opportunity to develop standards and ensure that the professions contribution is more visible. Failure to realize this opportunity may result in a threat to the further development of pharmaceutical care service.

**Aim:** demonstrating how integrated pharmaceutical care records can benefit patient care, the underpinning principles, and the key elements that are unique to a pharmaceutical care record.

**Method:** through review of existing literature and discussion with practising pharmacists and researchers, a consensus document was compiled.

#### **Results:**

## A. <u>Underpinning Principles for Pharmaceutical Care Records</u>

# **Cornerstones of Records**

- 1. The patient record must contain information relating to all the elements of care
- 2. Privacy and confidentiality should be guaranteed by those granted access
- 3. Patients should know why information is collected and how the data will be used. They should be informed of the consequences of not sharing information with relevant health-care professionals
- 4. Information on patients consent for the use and sharing of data should be documented
- 5. Information should only be used in the best interest of the patient and public health good
- 6. The record should be accessible to healthcare providers who have responsibility for the care of the patient, but the patient should be the arbiter of who has ultimate access to the record and may grant these rights to nominated people
- 7. Access to information should be regulated via appropriate secure authentification methods
- 8. Patients should be able to read their record and add to section(s) specific to them i.e. add information clearly integrated within their main record but identified as area(s) into which they can contribute (should be a 'patient friendly' area).
- 9. The patient has the right to 'visibly' shield parts of a record from nominated healthcare professionals.
- 10. The patient should have the right to alter or update inaccuracies in information in collaboration with the healthcare professional who documented it (note original data will not be deleted)

## **Pharmaceutical Care Perspective**

- 11.Pharmaceutical care information must be integrated into the record as part of the patient care process ie undertaken and documented at the right time. This is not a separate process to the rest of the care being given
- 12. The information recorded must reflect the care process.
  - Assessment
  - Problem identification and goals
  - o Implementation
  - Review & evaluation
- 13. Any system must automatically record who does what and when (this may include accessing external information sources)
- 14.Information recorded must reflect the contribution made by the practitioner and may include any specific features relating to clinical speciality or specific parts of the patient pathway (eg admission, transfer, discharge etc)
- 15.Information recorded should be of professional standard which respects the readership (training is required for pharmacy in this area)

#### **Record Structure**

- 16. The record should be built in such way that longitudinal information (core care elements) and information on acute episodes can be stored in a nested way.
- 17. It must be possible to update records but not edit them
- 18. There should be a mechanism that allows changes to the record to be highlighted and prioritised for others
- 19.A standard coding structure should be employed for all data recorded (this should mix coded and freetext).
- 20.Interoperable standards should be used to support transfer of information between care providers and settings

- 21. Standard terms should be agreed inc abbreviations
- 22. Existing systems should be used where possible

# *Implementation*

- 23.User approval and commitment is key to gaining acceptance for the need and use of pharmaceutical care records users need ownership, involvement in defining content and structure and clear understanding of how it should be used.
- 24.User satisfaction and use should be monitored to identify cultural acceptance and to form the basis of incremental modification

# Benefits

- 25.Information is available where and when required to support patient care
- 26. Data entered will support reporting
- 27.Information outputs can be used to derive and use process, performance and outcome indicators to improve the quality of care with the full involvement/knowledge of healthcare professionals responsible for the collection of the information
- 28. Information can be used to support re-engineering of the care process

## B. Risk Summary

There are a number of risks that are inherent in producing a shared pharmaceutical care record. These are summarised below, according to category:

#### Patient- or care-related risks:

• Risk of misunderstanding / misinterpretation

• Less time to care for the patient

# **Profession-related risks:**

- Risk that recording may be too much too soon
- Risk of keeping two records (personal one and one for sharing)
- Risk of recording 'bland' information
- Risk of developing defensive practice
- Risk of losing autonomy / unique 'niche'
- Risk of losing powerbase / ownership of pharmaceutical care processes
- Risk of not acknowledging other systems / requirements in other countries

#### Person-related risks:

- Could expose individuals' practice
  - o To peer pressure
  - o To review
  - To litigation
- Could highlight errors to others

## System-related risks:

- Poor security
- System complexity, resulting in many screens required to input data
- Risk of not getting balance right between data input and data use

In common with risks in general, those listed above may also represent benefits or opportunities to the profession.

## C. Key components

Within the principal care plan, there will be care episodes. Care planning should be associated with both the longer term chronic problems as well as the short term episodes that occur.

# **Medication profile**

What should be included?

 Information on medications (prescribed, over the counter preparations, medications obtained from other sources), dietary supplements, dressings and equipment; including information on dose, frequency,...

What are the display features?

- Medication history
- Current medication
- Rescue medication / seasonal medication

including comment boxes, eg to note information on unusual doses,...

# **Supply information**

What should be included?

- Information on what has been supplied, how much and when (optional: to whom)
- Information on source of supply

What are the display features?

Supply records (per substance, per date,...)

Including comment boxes (eg for unusual medication supply details)

## **Patient information**

What should be included?

- List of diagnoses, health problems, patient specific information,...: to be pulled from other elements in the electronic health record
- Patient provided information relating to problems, medication,...

## What are the display features?

- Demographic information
- Active medical problems
- Chronic problems
- All relevant patient provided comments

#### **Assessment**

- Reasons for the episode of care (maybe acute or chronic)
  - Patient requests / complaints
  - Patient admitted to hospital
  - Other professional requests
  - Pharmacist identified problem(s)
  - Treatment goals not achieved
  - System alert(s)
- Medication for which a problem is suspected
  - Health problem
  - Process issue (eg potential drug interaction; K<sup>+</sup> levels not measured,...)

# Action / plan

What should be included?

- Interventions performed (from a list of interventions + free text; detailed)
- Why intervention has been chosen
- Timetable / schedule for re-assessment (to generate alerts, worklist,...)
- Plan
  - What should be done (including priorities)
  - By whom
  - Goal
  - Timetable

#### **Outcome**

What should be included?

What happened with the intervention and what happened to the patient (partly to be pulled from other sources)

- Response to medications
  - Laboratory data
  - Clinical data
  - Use of (other) medication
  - Self-report
- Conditions / health problems
  - Current active medical problems
  - Relevant clinical episodes
- Process issues
  - Compliance with care plan

# Review of information to provide holistic patient view

What should be included?

- Evaluation
- Therapeutic goals
- Options
- Priorities
- Plan

(overall: add examples)