Integrated Care Plans link quality and efficiency and allow multidisciplinary input. By continually reviewing this process, the focus is on improved quality of care and efficiency of service leading to cost effectiveness.

Reasons for Implementation
Organizational Benefits
Quality initiatives now seem to dominate purchaser/provider relationships. Quality can ensure the survival of a Trust. St Mary's saw ICP as an effective tool in measuring and delivering care. A criticism levelled at quality standards is that they are imposed rather than reached jointly. ICP involves all health care professionals in quality issues. This obviously benefits the Trust because with staff commitment to quality it should be ensured. Feeding back organizational variance to senior management for them to act on demonstrates to staff at the patient interface that change can be effected and quality addressed. It is felt that this is the way that we can build an outward looking organization that ensures processes are redesigned and attention focused on seamless care. At St Mary’s Trust the project is seen very much as a way for staff to influence the future development of the care delivery process.

We have a great deal to learn from industry. Many people do not seem to have taken on board the fact that we work in a market structure and that we have to be efficient as well as effective and equitable to survive. The applications of the tool within a risk management framework cannot be too strongly highlighted and with increased interest in this area it is a bonus to have the building blocks already in place.

Other benefits which were identified in the USA included reduced length of stay[1]. Using the Ellis Dissociation curve (B.W. Ellis, Ashforth Hospital, Middlesex), this hospital has seen a trend to a reduction in length of stay for patients undergoing coronary artery bypass grafts (see Figure 1).

Communication Benefits
The increased level of meaningful communication between all disciplines has to be one of the greatest benefits that ICPs offer. Even teams who have been working together for some time were amazed at how little the rest of the team knew about each profession’s input to an individual case type. The fact that each discipline has their contribution written down alongside the others enables the progress of that patient as a whole to be accurately charted. The initial meeting of all those involved can often iron out anomalies in care. Some care is often being done by more than one person because it has never been clarified who exactly should be doing what, or things are being missed because it was not realized that no one was doing it. This may sound very simplistic but St Mary’s is not unique. Cost implications are often
identified at the writing stage. During the writing of at least two pathways it was established that tests were being performed unnecessarily by junior doctors and nurses.

**Patient Benefits**
Patients have expressed very positive opinions regarding the use of ICPs. The fact that their care is planned out leads to increased reassurance about the whole episode of care and takes a big step towards patient empowerment. If a planned goal is not met patients have said that they feel more able to question using the pathway.

St Mary's Trust board decided that the goal for this project would be at least one pathway in each directorate within the year. Their commitment was demonstrated by the appointment of part time co-ordinators.

**Role of the Co-ordinator**
The role of the co-ordinator is vital to the success of the project; in fact a pathway was launched prior to the appointment of a co-ordinator which later lost all momentum and stopped due to the lack of a sustaining force. The co-ordinator's role involves teaching, informing, implementing, motivating, sustaining and evaluating. It is crucial that the co-ordinator remains objective as the team explores thoughts on care. They are being asked to review current practice when formulating a pathway and, therefore, the co-ordinator should not contribute any personal views. It is important to remember that the multidisciplinary team must own the pathway. If resistance to change is also to be overcome the co-ordinator must be perceived as credible. The project would be likely to fail if the team felt that senior management was introducing this project; they may feel that there is a hidden agenda. To overcome this at St Mary's all the co-ordinators come from a clinical background.

St Mary's launched the concept within the cardiac sciences directorate as they had expressed an interest in this area. This is an important decision when introducing a pathway; it is advisable to introduce it in an area where success can be guaranteed due to the motivation of the multidisciplinary team. It is generally acknowledged that if all interested parties are not involved in the change process, then the change has a far reduced chance of success. The first pathway was for patients undergoing coronary artery bypass graft. The variance information from this initial case type highlighted areas of potential improvement in clinical and organizational functions. From this it was decided to expand the project into other cardiac areas including myocardial infarction and percutaneous transluminal angioplasty.

**Writing a Pathway**
There are several steps to formulating a pathway:

1. **An initial meeting is arranged with the consultant and ward manager to decide on a case type.** It is tempting to choose a complex case type that could be used to highlight many areas; however, the change is more easily introduced with a simple, high volume case type.

2. **Meeting of the multidisciplinary team.** To formulate the pathway each discipline is asked to review current practice for a particular case type and to document their interventions.

3. **Once agreed by the whole team (this may take several meetings) the pathway is documented.** This then becomes the working document for the patients’ episode of care (see Figure 2). It is preprinted and any deviation from the determined pathway is documented on the variance sheet. This ensures that the pathway reflects the patient as an individual and provides an audit tool through the analysis of the recorded variances. The patient is involved with the pathway. On admission, the pathway is discussed with the patient and some pathways have areas which the patient completes, thus involving them more closely in their care, perhaps one of the first steps towards facilitating patient empowerment rather than simply talking about it.

4. **The pathway is completed by all the disciplines looking after the patient.** If something is not signed for, then it is assumed that it has not been done. This stance has highlighted the need, in these days of increased litigation, for organizations to be aware of what is and is not recorded.

**Variance Recording**
When a patient's treatment/progress does not match the pathway a variance is recorded. This may be positive or
negative, i.e. if a patient is tolerating fluids he/she may move onto a light diet more quickly than was anticipated. The analysis of the variances recorded forms the basis of the clinical audit information which is obtained from every pathway. It is not just clinical audit but organizational audit that can be easily obtained from the variances. Anecdotal reasoning has historically been utilized by health care professionals when trying to increase resources or when trying to explain delays in treatment. ARP/ICP allows accurate measuring of these problem areas (see Figure 3). This now allows the multidisciplinary team to question their practice in that they can now identify if they are overbooking tests or if indeed the organization is under-resourced.

It is worthwhile mentioning the great volume and detail of information that can be gleaned from variance recording. If the ICP work is integrated early on into the work of the clinical audit team then the information can be managed in the most effective way.

Litigation

Mention was made earlier of the increasing problems of litigation within the health-care sector, and it is worthwhile to cover these.

- As with any paperwork used that is preprinted there is an issue that concerns whether people tick
or sign for interventions performed. The UKCC is quite specific concerning this issue and it is felt that each unit has to bear the responsibility of those working there to ensure that all paperwork, not just ICPs, are completed to a level that would stand up in a court of law.

The other issue commonly raised is how do ICPs stand up if a problem occurs, for example, if something has not been done which was written on the pathway. The legal profession seems agreed that what the courts would be looking for is that there was a systematic controlled environment to care and that agreed standards were in place. Many professions would say that they already had set ways of treating various problems and conditions but unless this has actually been written down by that team as a whole, how can they say that they meet the criteria? One of the most important ideas behind variance tracking is that a system has been inbuilt that aims to rectify mistakes as they happen, or at least raise awareness of an issue so that procedures can be developed to address issues.

Conclusion

Other units have adopted ARP/ICP as a quality initiative but little has been written from a teaching hospital perspective. For this article we have drawn mainly on our experiences and anecdotal evidence as the project has not been running long enough for us to produce large-scale statistical evidence and without enough data it was felt that conclusions might be drawn that were not factually based.

Implementation has not been without its difficulties, many of these due to the very nature of a teaching hospital. It has a very hierarchical structure, historically established practices, and seemingly inbuilt resistance to change, particularly in London where post Tomlinson has seen an unsettled climate. However, changes in practice and organizational systems have been demonstrated which encourages the roll-out of this project. It is now becoming self perpetuating with teams taking the initiative and requesting the implementation of a pathway.

The difficulties encountered have in most cases been surmountable. Concerns have been expressed regarding the confidentiality of information obtained and who will be informed of the variances. It is always reiterated that the information belongs to the team and that it goes no further without their permission. In order to foster this idea of ownership, the project has now reached the stage within one directorate where the co-ordinator is withdrawing and the information is going to be managed entirely by the teams owning it. This should ensure that the pathways remain relevant and dynamic. They can easily be changed to reflect areas of special interest and information from variances can be turned round more quickly. St Mary’s Trust board has reiterated their support for this project by putting it high on the list of Trust objectives for this financial year.

Reference


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