Successes and challenges in the implementation of care pathways in an intellectual disability service: health professionals’ experiences

Keywords: Care pathways, intellectual disabilities, learning disabilities, service implementation, managing change, strategies
ABSTRACT

Health care pathways are a relatively new approach to delivering care in intellectual disability services. This study aimed to ascertain and explore successes and challenges in the implementation of care pathways in a National Health Service (NHS) adult intellectual disability service in Leicestershire, United Kingdom. Data were obtained from a variety of sources including observations of multidisciplinary team (MDT) meetings, issue logs and feedback from health professionals. Constant comparative analysis identified 10 themes; communication between health professionals; clarity and dissemination of relevant documentation; multidisciplinary working; role of health professionals; role of administrative staff; locality differences; information technology systems, care pathway procedures, attitudes towards care pathways and impact on patients. Successes and challenges in the implementation of care pathways and of health service changes more generally are discussed.
INTRODUCTION

People with intellectual disability are a particularly vulnerable group who experience health inequalities, greater social exclusion and significant barriers to accessing health care services compared with the general population (Havercamp, Scandlin & Roth 2004; Lindsey, 2002). They are at an increased risk of psychiatric, physical and sensory health problems (Bhaumik, Tyrer, McGrother & Ganghadaran, 2008; Department of Health, 2001; Roy, Dunn & Bissaker, 2003), which can lead to premature mortality (Patja, livanainen, Vesala et al. 2000; Tyrer & McGrother, 2009). Despite this, they access health care services less often and have poor experiences within services (Department of Health, 2001; Lindsey, 2002; Havercamp, Scandlin & Roth 2004; Turk, Kerry, Corney et al. 2010).

The concept of health care pathways was first introduced in the 1980s in the USA (Zander, Etheredge & Bower 1987; Zander 2002; Hindle & Yazbeck 2005; Bower 2009; Panella, Vanhaeche & Sermeus 2009) and in most developed countries, including the United Kingdom (UK), in the 1990s (Johnson 1997; Zander 2002). Pathways outline the essential steps in the care and treatment delivered for a patient, including anticipated care over a given time period and documentation of milestones and clinical interventions throughout the patient’s clinical experience (National Leadership and Innovation Agency for Healthcare 2005). It is maintained that care pathways can improve quality of patient care and reduce resource costs by minimizing delays and providing a coordinated approach to evidence-based assessment, intervention and service provision (Atwal & Caldwell, 2002). They may also enable quality monitoring of services (Campbell, Hotchkiss, Bradshaw & Porteus, 1998), improve health professionals’ relationships and understanding of their roles, and improve patients’ experience (Ahmad, Roy, Brady et al, 2007; Simkiss, 2005).

Care pathways are a relatively new approach to working for adults with intellectual disability (Roy, Dunn & Bissaker, 2003). The additional health care needs of this client group mean that any new approaches to service delivery need to be planned and monitored extensively.

The current study was conducted as part of a broader programme to evaluate the change to a care pathways approach in a NHS adult intellectual disability service in Leicestershire, UK. Prior to the implementation of pathways, the service comprised the same integrated locality teams. However, clinical care was not standardised and there was wide variability in practice
within and between teams in terms of recording initial assessments, feedback to patients and referrers and adherence to clinical standards. There were also fewer team meetings and generally less discussion with regard to patient referrals and clinical care.

The decision to change to a care pathway approach was made in response to the publication of two key UK government documents (Department of Health, 2007; Michael, 2008), extensive discussions with commissioners, health professionals, patients and carers, and existing evidence. The implementation of care pathways in similar intellectual disability services in the UK had shown promising results in terms of risk assessment, monitoring, interdisciplinary communication and patient satisfaction (Ahmad, Roy, Brady et al, 2007). The primary focus of the current study was to evaluate the transition process to care pathways from health professionals’ perspectives. It is well recognized that professionals are resistant to change, often feeling a loss of status and uncertainty about the future (Callan, 1993). Changes in health care can be seen as a means of exerting control through target setting, without consideration to changing health care needs (McMurray, 2010). By recognizing and identifying the successes and challenges in pathway implementation it was hoped that strategies could be devised for future service changes that would minimize disruption to health professionals without compromising on the quality of patient care.

Aim

With the above in mind, the authors carried out this study to identify successes and challenges in moving to a care pathways approach using data on health professionals’ experiences. Although concerned with a specific service change, this study has broader applicability for health professionals, commissioners and policy makers tasked with implementing health service changes.

METHODS

The study was carried out in the unitary authorities of Leicester city, Leicestershire and Rutland, UK, which has an adult (aged 18+ years) population size of almost 0.8 million (Office for National Statistics, 2011). The adult intellectual disability service covers seven areas, or ‘localities’, in this geographical location and sees approximately 3000 adults with intellectual disability each year. A team of healthcare professionals is responsible for each locality and theoretically comprise a health professional from each discipline, namely:
psychiatry; psychology; community nursing; occupational therapy; outreach nursing; speech and language therapy; and physiotherapy. In practice, health professionals from a number of disciplines cover more than one locality. The service employs approximately 50 full or part-time health professionals.

In 2011, following an initial pilot stage, the service agreed to implement eight care pathways: Autism; Challenging Behaviour; Complex Physical Disability; Dementia; Eating and Drinking; Epilepsy; Mental Health; and Forensics. A multidisciplinary team led by a health professional was responsible for the development of each care pathway. Professionals leading on each pathway varied in discipline according to the nature of the pathway: Autism, Mental Health, Epilepsy and Forensics were led by psychiatrists and nurses; Challenging Behaviour by a psychologist; Complex Physical Disability by a physiotherapist; Dementia by a practice development nurse; and Eating and Drinking by a speech and language therapist. In addition to the above, the service agreed on a ‘Core’ care pathway for all patients. This pathway was led by the Clinical Director and included initial tests and assessments, demographic, clinical and referral information and details of the subsequent pathway to which the patient was allocated. Information on the Core pathway was accessible to all health professionals via a shared access folder (i.e. folder held on a secure server).

Prior to implementation, a care pathways implementation group (CPIG) was established. Chaired by the Clinical Director (a psychiatrist), this was attended by the implementation lead (an occupational therapist), head of service, a practice development nurse, a speech and language therapist, two community nurses and a social worker. Health professionals were asked to inform the CPIG of decisions to place patients onto a care pathway during the first stage of implementation. Such decisions were discussed at the group meeting and any concerns addressed.

Participants
All health professionals in the intellectual disability service were informed that a service evaluation was taking place and that their correspondence (written e-mails and issue logs) in relation to care pathways implementation would be analysed. Health professionals were given the opportunity to opt out of this analysis (none did).
**Procedure**
Between October and December 2011, the researcher recorded comments and issues about care pathway implementation from all multidisciplinary team (MDT) meeting minutes, e-mail correspondence to the CPIG (printed and stored by the implementation lead in a file) and issue logs (logs of problems and queries held by each locality team and fed back to the CPIG). The researcher also observed MDT meetings, a care pathway workshop for health professionals, CPIG meetings and professional team meetings. Issues were recorded verbatim as far as possible. All meetings were attended over the 3-month period with the exception of the MDT meetings in one locality which were held outside the researcher’s working hours. The researcher was employed specifically for the service evaluation and the study was project managed by a university employee so that data collection and analysis could be as impartial as possible.

**Analysis**
Constant comparison analysis following the procedure outlined by Braun and Clarke (2006) (see also Morgan 1993) was used to analyse the responses. The transcripts were read until the data were familiar and preliminary ideas for coding were recorded. The coding involved reading the transcripts and assigning a code to sentences, paragraphs or sections. Each code represented a theme or sub-theme in relation to the research question. For example, the code ‘Communication between Health Professionals’ was assigned to sentences, paragraphs or sections indicating possible issues in communication between health professionals and the CPIG in relation to care pathways. After coding the first manuscript, a thematic map was created. Other transcripts were carried out with this template in mind and new codes were added as necessary. The manuscripts were then re-read until no new codes emerged and a final thematic map was produced.

Transcripts of health professionals’ e-mails and observations were attributed to the health professional’s discipline and team. This was not possible for transcripts of generic team feedback e-mails, issue logs and minutes. To preserve anonymity, neither team nor health professional discipline were reported in the analysis.
Ethical approval

Ethical approval was not sought for this service evaluation. The study was approved by the Institutional Review Board.

RESULTS

Identified themes

Figure 1 illustrates the ten prevailing themes from analysis of the transcripts: communication between health professionals; clarity and dissemination of relevant documentation; multidisciplinary team working; role of health professionals; role of administrative staff; locality differences; information technology systems; care pathway procedures; attitudes towards care pathways; and impact on patients.

< “Insert Figure 1 Here” >

1. Communication between health professionals

The role of communication in care pathways was widely acknowledged and discussed. Communication within the teams was perceived to have been heightened. Health professionals identified an increase in access to other professionals as well as more input and discussion. As a result of this most staff members found the weekly allocation meetings and discussions within these meetings very useful.

< “Insert Table 1 Here” >

The communication system put in place for the implementation process included CPIG members visiting teams in rotation, issue logs for teams to identify and report problems and e-mail correspondence to the CPIG. However, health professionals felt that the communication from the CPIG had been inconsistent (Table 1.A; Q1) whilst highlighting that they valued their support (Table 1.A; Q2). The teams provided feedback to the CPIG via issue logs, feedback emails and CPIG members. Disappointment with the lack of, and delay in response to issues raised was expressed (Table 1.A; Q3).
2. Clarity and dissemination of relevant documentation
Pathway protocols were viewed as clear and easy to follow. However, one locality indicated that they felt that some of the documents were not clearly defined. The dissemination of documents appeared to be an area of particular difficulty. Lack of communication with regard to the existence and location of the latest version of pathways documents was highlighted (Table 1.B; Q4 and Q5). In response to these difficulties, the CPIG identified a need to version control the documents and developed an intranet site to improve accessibility.

3. Multidisciplinary team working
There was a shift towards MDT working during the implementation process and the sub-theme of team work was highlighted. Health professionals identified an increased understanding of different professionals’ roles as well as improved interdisciplinary relationships. Team working also enabled professionals to provide support and assistance to others (Table 1.C; Q6). The increased team responsibilities created difficulties with regard to non-attendance of professionals at team meetings (Table 1.C; Q7). The need for clear leadership in the teams to help facilitate the care pathways approach was also identified. Observations by the researcher indicated that the teams followed the care pathways approach with less adherence in the absence of this leadership.

4. Role of health professionals
Care pathways required health professionals to take on a number of new roles within the service. One of these roles was care coordinator. The care coordinator played a critical role in maintaining and sustaining regular contact with the patient and carer(s) and in coordinating, monitoring, recording, planning, delivering and reviewing the patient’s care. Health professionals also had increased responsibilities within the team and the team meetings. Difficulties were highlighted when professionals failed to fulfil these roles (Table 1.D; Q8). The new roles sometimes required skills and knowledge that the professionals did not possess and the need for additional training was recognised. Some professionals felt that introducing care pathways resulted in an increasing demand on their time. These demands included the time needed to read the care pathway guidelines, attend team meetings and to complete the core information. This was particularly difficult for smaller teams and short staffed disciplines.
5. Role of administrative staff
Implementing care pathways had a large impact on the role of administrative staff. The administration team were taking on a variety of new roles to assist health professionals including documenting core information, updating the referral spreadsheet and assisting the chair person to follow the care pathways approach in the team meetings. The job description and skills needed for this new role were considered to be important (Table 1.E; Q9). The role, capacity and performance of administrators were varied and this impacted on the ease to which localities were able to implement pathways. The substantial burden on administrators’ time was highlighted and caused particular difficulty in localities with less administrative support. The importance of administrators and their roles in supporting the care pathways approach was emphasised (Table 1.E; Q10).

6. Locality differences
Differences in implementation across the localities were evident in the responses and covered a range of procedures, such as completion of core information, recording reasons for variance and version control of the relevant documents (Table 1.F; Q11). Some responses indicated that the size of the locality team may have influenced these differences (Table 1.F; Q12). While larger teams had the advantage of adequate representation of various disciplines, managing all the referrals received each week and achieving clinically meaningful discussion was difficult. Some of the smaller teams suffered due to lack of adequate representation from all professional disciplines where professionals covered more than one locality team and struggled to attend all allocation meetings.

7. Information technology systems
Despite the benefits of shared access to information, the organisation of the care pathways documents in the shared folder was raised as an issue (Table 1.G; Q13). Emphasis was placed on the need for on-going monitoring of the shared folder to ensure that only the latest care pathway documents were available (Table 1.G; Q14). Difficulties were also experienced with applying care pathway terminology to the teams’ clinical information system database.

8. Care pathway procedures
Health professionals’ understanding of care pathways was still developing and further support and guidance from the CPIG was frequently requested (Table 1.H; Q15). Storyboard methods were seen as a useful tool to aid understanding by both the professionals and the
CPIG (Table 1.H; Q16). This involved identifying one or two patients from each team and describing their journey, highlighting areas of good practice as well as barriers to improving practice. Concerns with the structure of some aspects of the care pathways under development were identified and were viewed to have hindered implementation (Table 1.H; Q17).

9. Attitudes towards care pathways

The transcripts revealed positive comments about certain aspects of care pathways. Some health professionals praised the use of time scales, multidisciplinary working, improved information gathering to inform clinical decisions and a more coordinated and standardised approach to care. Positive attitudes were also reflected in the teams’ use of issue logs to highlight difficulties and suggest improvements to the CPIG (Table 1.I; Q18). Negative attitudes primarily concerned the pressure and demand of changing working practices (Table 1.I; Q19), but over time professionals appeared to be adapting to the new approach (Table 1.I; Q20). In some cases the CPIG perceived that health professionals did not fully acknowledge their feedback and were resistant to change.

10. Impact on patients

Health professionals felt patients benefitted from greater team discussion (Table 1.J; Q21) as a result of pathway implementation and standardised treatment, without causing delay to high risk clients. However professionals expressed the view that identifying care pathways was more difficult for complex patients (Table 1.J; Q22) and careful consideration should be given to individuals who had multiple needs and were allocated to more than one pathway.

DISCUSSION

The findings provide a valuable insight into health professionals’ experiences of service change and highlight areas of good and bad practice when implementing change in the health care setting.

Overall, health professionals described many successes in implementing care pathways in a NHS adult intellectual disability service in Leicestershire, UK. Communication within and between the teams appeared to improve, possibly owing to greater emphasis on collaborative team working (Ahmad, Roy, Brady et al, 2007; Atwal & Caldwell, 2002; Simkiss, 2005).
Consistent with previous research (Hall, 2001; Jones, 2000; Roy, Dunn & Bissaker, 2003), health professionals appeared to view care pathways as a valuable approach to managing the delivery of care, describing a more coordinated and standardized approach, which ultimately benefited patients. There was also a perceived reduction in workload, likely to have resulted from the increase in sharing of information and reduced duplication, a benefit associated with care pathways (Roy, Dunn & Bissaker, 2003). Also in line with previous work (Hall, 2001; Roy, Dunn & Bissaker, 2003a), health professionals acknowledged some benefits to patients, such as MDT input to care and standardized evidence based treatment.

Conversely, the implementation of care pathways raised a number of challenges with regard to the pressure and demand of changing working practices. This may reflect anxiety and uncertainty about the future associated with organizational change (Callan, 1993) or perhaps a reluctance to objectively examine the delivery of care and to change clinical practice (Jones, 1999). In terms of the increased demand on health professionals’ skills and time, it might be expected that over time health professionals would become more familiar with the new approach and adjust to their new roles and responsibilities as has been previously found (Atwal & Caldwell, 2002). This evaluation also coincided with a number of staffing and organizational changes which have been fairly endemic in the English NHS in recent years (McMurray, 2010). Such changes are likely to have had a negative impact on morale and health professionals’ willingness to engage in the new strategy.

Another challenge identified related to allocating patients with multiple needs to more than one care pathway. Previous work has suggested that some health professionals believe care pathways are too simplistic to address complex care (Jones, 2000). However, it is argued that clinicians should still be able to express professional judgements and offer person-centred care under care pathways (Hall, 2001).

Evidence suggests that effective communication and leadership is central to organizational change (Lewis, Schmisseur, Stephens & Weir, 2006; Gilley, Godek & Gilley, 2009; Hewison, 2012; Hendy & Barlow 2012) and more specifically to implementing care pathways (Sinuff, Cook, Giacomini, Heyland & Dodek, 2007). Our findings confirm the importance of leadership in improving health professionals’ motivation and understanding of new approaches to health care provision. In our study, the implementation lead and Clinical Director had a vital role in communicating care pathways to health professionals, outlining
the process, perceived advantages and how professionals’ roles would change. Inconsistent communication appears to have hindered professionals’ ability to adapt to care pathways, and increased their levels of anxiety and frustration.

The differences in implementation across the localities highlight how teams react to change differently according to the leadership, structure and personalities of individual members within the teams. The different sizes of the locality teams may also have affected the working ethos. It has been acknowledged that larger teams tend to need more formal control systems and delegation (Batool, 2011) and struggle to disseminate unambiguous information (Vaccaro, Jansen, Van Den Bosch & Volberda, 2012). Conversely, smaller teams tend to display greater commitment to proposed strategies (Vaccaro, Jansen, Van Den Bosch & Volberda, 2012). Perhaps consideration should be given to the size of the team when communicating strategies for change.

Inevitably, due to the stage of implementation, the professionals’ understanding of care pathways was still developing. Storyboards, describing the journey of a service user through the care pathway approach, proved to be a useful tool in aiding understanding of care pathways. To further enhance learning and understanding the National Institute for Health and Clinical Excellence (2007) suggests that learning tools, such as storyboards, should be available for web-based learning.

A carefully planned dissemination strategy may have alleviated some of the problems the health professionals encountered. Facilitators recommend developing all aspects of the care pathway documents before implementation and then revising them to reflect experience of their application to clinical practice (Roy, Dunn & Bissaker, 2003). It has also been observed that time constraints limit health professionals’ ability to read care pathway guidelines and complete relevant documentation (Atwal & Caldwell, 2002). It would be interesting to measure how often the care pathway documentation was read and completed by the participants of this study.

LIMITATIONS

This was a small-scale social science study using several methods of data collection. It is important to consider the context and the effects of the researcher when interpreting the
health professionals’ comments. The issues we have identified are very much a snapshot at a specific implementation stage: they are likely to vary markedly throughout different stages of implementation. It is also important to acknowledge the potential subjectivity of the researcher’s interpretation of the data. An audit trail was maintained and a constant comparative approach was adopted to preserve a critical perspective. Bias was minimized by the researcher being a new employee of the service, managed by someone outside the service, and in a role that was not directly affected by pathway implementation. However because of resource limitations, we were not able to employ a separate researcher to repeat code the data. Similarly, the researcher was not able to observe at one locality team meeting and thus this team’s views are likely to have been under-represented in the analysis.

CONCLUSIONS

The findings demonstrate that implementing a new care pathways approach to service delivery in the health care setting can be challenging for health professionals. Some of the challenges identified are generic to service change and can be addressed through careful, organized planning of the implementation process. Other issues, such as organizational culture and attitudes within the organization, are contextual, unique to each service and need to be considered by the facilitators of implementation. Undoubtedly the provision of clear and consistent two-way communication is essential to support service change. Further, those responsible for implementing new approaches to service delivery have a crucial role in guiding, supporting and encouraging commitment.

REFERENCES


Figure 1. Final thematic map showing the ten main themes identified in relation to successes and challenges in the implementation of care pathways from health professionals’ perspectives.
Table 1. Health professionals’ comments and observations

A. Communication between healthcare professionals

| Q1 | “It’s frustrating because different teams are being told different things.” |
| Q2 | “It’s very useful to have continued support i.e. attendance from (CPIG member) at the team meetings.” |
| Q3 | “The previous subgroup raised lots of discussion and issues but we did not get any feedback from the pathway team and therefore felt what’s the point.” |

B. Clarity and dissemination of relevant documentation

| Q4 | “The protocols for the Dementia care pathway were located in the wrong folder on the shared drive. They’re in the Autism folder.” |
| Q5 | “We weren’t informed that there was a new referral form.” |

C. Multidisciplinary (MDT) team working

| Q6 | “Receiving a locality rather than professional team referral means individuals are more able to step in and help out colleagues.” |
| Q7 | “It’s difficult to allocate a care coordinator when a professional team is not present.” |

D. Role of health professionals

| Q8 | “It’s an issue that professionals are not sending a summary of the core information when they’re not attending the meeting.” |

E. Role of administrative staff

| Q9 | “Need to identify and shape the skill admin are being asked to do, what knowledge they need and whether they have the time and skills available.” |
| Q10 | “Without admin support the team would fall apart and struggle to do pathways.” |

F. Locality differences

| Q11 | “Too many differences exist between localities in implementation of pathways, including where documents are located for each team on the business unit drive.” |
| Q12 | “MDT meetings are easier for other teams as they have fewer staff, who can attend consistently, whereas at the [name of locality] MDT attendees are always changing.” |

MDT Multidisciplinary team

G. Information technology systems

| Q13 | “The folders on the shared drive are unorganized and it’s difficult to find what you’re looking for.” |
| Q14 | “The older referral form is still on intranet and at one point there were four different forms with no versions.” |
### H. Care pathway procedures

| Q15 | “For the care coordinator role to work it needs to be practiced and worked e.g. through a story board and it would be good to have support from the implementation team in doing this.” |
| Q16 | “Storyboards worked well to identify which pathway was the most appropriate and can help staff pick up an understanding of others professionals roles and their involvement with a service user.” |
| Q17 | “If implementing change then all the resources need to be in place first.” |

### I. Attitudes towards care pathways

| Q18 | “The action plan column in the agenda is really useful and should be communicated to other teams.” |
| Q19 | “Changing to pathways have been demanding of all staffs time. The additional work and pressure to be a coordinator can appear as negative.” |
| Q20 | “Using the pathways and completing paper work is getting easier.” |

### J. Impact on patients

| Q21 | “Pathways prompt more discussion around a referral so it’s allocated appropriately.” |
| Q22 | “Care pathways are difficult when patients needs require more than one pathway.” |