

REVIEW ARTICLE

Gastrointestinal bleed pathway documentation by nurses and physicians:
a literature gap

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ABSTRACT

Background: Upper gastrointestinal bleed is the serious medical condition which needs immediate interventions to prevent patients from serious complications. Nurses and physicians neglect gastrointestinal bleed pathway documentation which results in improper patient care management. **Aim of the study:** The aim of this paper is to overview the reviews on gastrointestinal bleed pathway documentation and also to identify the barriers of gastrointestinal bleed pathway documentation among physicians and nurses.

Methods: Literature search was undertaken in a systematic way to explore and review the existing literature related to documentation in GI bleed pathway and the barriers of documentation among nurses and physicians. For literature search, four major databases, CINAHL plus with full text, PUBMED, Cochrane library and JSTOR were used. Other search engine like Google scholar was also used to find the relevant literature. These databases were searched for the time period between 2000 and 2012.

Results: The literature review reveals studies on effectiveness of gastrointestinal bleed pathway on patient's outcome, effect of clinical pathway on documentation, and barriers of documentation in clinical pathway. However, globally, none of the study focused specifically on gastrointestinal bleed pathway documentation among nurses and physicians.

Conclusion: There is a gap in literature regarding physicians and nurses' practice towards documentation of gastrointestinal bleed pathway. It is recommended that base line study is needed in this area to overcome the issue of managing gastrointestinal bleed patients and to improve patients' quality of care.

Keywords: Gastrointestinal bleed; Clinical pathway; Documentation; Nurses; Physicians .

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Introduction:

While working in medicine unit of one of the tertiary care hospital of Pakistan, it was observed that various patients were admitted under care of gastroenterology, oncology, or neurology services. In gastroenterology services, there were patients with Upper gastrointestinal (UGI) bleed, hepatitis, appendicitis, cholecystitis and many others related to gastrointestinal (GI) problems. Among them, UGI bleed is the serious medical condition which needs immediate interventions to prevent patients from serious complications. It was observed that number of UGI bleed patients has increased gradually which required more time from nurses and physicians for thorough assessment, counseling, diagnostic procedures and education. Therefore, it was noted that nurses and physicians were unable to do proper documentation which resulted in improper patient care management. That is the reason nurses and physicians need to be re-assessed for their documentation skills for managing these patients.

The aim of clinical pathway is to implement evidence based practice, reduce duplication through standard tool and reduce variation in health care services. GI bleed pathway is followed for the patients with UGI bleed to provide immediate care with specific guidelines and protocols. Various issues have been observed regarding documentation of GI bleed pathway among nurses and physicians. It was noted that physicians and nurses were non-compliance with pathway documentation. The pathways were found to be incomplete or several sections were underused. In few instances pathway was not signed and dated by nurses and physicians.

The documentation enables effective communication between nurses and other health care providers about the patients' condition and the interventions that were carried out, and also the patients' response to those interventions. Documentation is not separate from care and it is not optional; however, it is an integral part of practice and it is an important tool that is used to ensure high-quality care. Documentation is also a risk management for the patient receiving care, for the staff providing the care, and for the organization. Most importantly, the purpose of introducing clinical pathway in the health care setting was to facilitate communication among multidisciplinary team and to provide organized, coordinat-

ed, cost effective, and quality care to the patients; however, without proper documentation it cannot be achieved. Therefore, there is an immediate need to work on documentation of GI bleed pathway.

Aim of the study

The aim of this paper is to overview the reviews on GI bleed pathway documentation and to identify the barriers of documentation of GI bleed pathway among physicians and nurses.

Methodology:

Literature search was undertaken in a systematic way to explore and review the existing literature related to documentation in GI bleed pathway and the barriers of documentation among nurses and physicians. For literature search, four major databases, CINAHAL plus with full text, PUBMED, Cochrane library and JSTOR were used. Other search engine like Google scholar was also used to find the relevant literature. These databases were searched for the time period between 2000 and 2012. Different key words or combination of key words like GI bleed, clinical pathway, nurses and physician documentation, barriers, attitude and influencing factors were used for all the search engines. A different synonym of clinical pathway like critical pathway, and integrated care pathway was also used to find relevant literature. These key words have been searched by appearing in abstracts, titles, headings, editorials and review articles of all databases. A separate search was carried out for identifying the available literature in Pakistan. For this purpose the term Pakistan was added along with other key words. In addition, 'ancestry approach' was also used to search for the relevant literature, in which the reference lists of retrieved articles were checked for other relevant references.

Findings:

The literature review is divided into four sections. The first section will present the prevalence of UGI bleed and overview of clinical pathway. The second section will discuss the studies related to the effect of clinical pathway on documentation. The final section will describe the studies related to barriers of documentation in clinical pathway by physician and nurses.

Upper Gastrointestinal bleed and Clinical Pathway

GI bleed is one of the major life threatening emergencies which remain a common cause of hospitalization (Cerulli, 2011). UGI bleed is defined as bleeding derived from proximal to the ligament of Treitz. The incidence of UGI bleed is approximately 100 cases per 100,000 population (Cerulli, 2011) in developed countries whereas the incidence of UGI bleed in developing countries including Pakistan is not known but it is expected to be comparable with global statistics (Mumtaz et al., 2011). Mortality rates from UGIB are 6-10% overall. Therefore, it is highly important that patients with GI bleed should be managed properly to decrease morbidity and mortality.

Clinical pathway is also known as care pathway, critical pathways or integrated care pathways. Globally, these terms are used interchangeably. The Pathway was originated from industrial processes and then introduced in health care system in the early 1980s in the USA (Vanhaecht, Panella, Zelm, & Sermeus, 2010.) It has been widely used in USA, UK, Australia and other developed countries; however, its use in developing countries including Asia has been sporadic (Cheah, 2000) which might have hindered the patient quality of care. Clinical pathways have been proposed for those diseases which require frequent hospitalization and are expensive to treat and have high variation in diagnosis and treatment (Mumtaz et al., 2011); hence, to provide cost effective care to the patients. The upper GI bleed meets all these criteria and qualified for the need of pathway.

Different theoretical literature have emphasized on importance of pathway. According to Cheah (2000), pathway is used to plan, coordinate, deliver, monitor, and document the care concurrently whereas Claridge, Parker, & Cook, (2005) emphasized that "integrated care pathways are documents that integrate both the medical and nursing notes, and are structured around current evidence-based standards, national guidelines and local best practice" (p. 58).

Globally, very few studies have been conducted to evaluate the effectiveness of GI bleed pathway on patient's outcome which revealed inconsistent findings. A comparative study was conducted in Pakistan among patients whom pathway was followed and whom pathway was not followed. The findings of this study revealed that there was an improvement in time to UGI endoscopy, but it did not reduce the patient's length of

stay (Mumtaz, 2011); however, effectiveness was not measured in terms of documentation. A Study by Podila et al., (2001) in USA reported that GI bleed pathway decreased patient's length of stay without increasing number of adverse outcomes. Another study from USA found that GI bleed pathway decreased the patient's hospital cost; however, it did not impact on patient's length of stay and time to endoscopy (Pfau et al., 2004).

Effect of Clinical Pathway on documentation

Literature emphasized that clinical pathway implementation could be challenging. If not handled well, it may create obstacles. Factors which are crucial for implementation of pathway are to educate all staff members who would be involved in any component of the pathway. Any misconception regarding pathway should be addressed properly. Another important factor is to define the roles for taking responsibility of pathway: Will there be a case manager? Who will make sure that pathways are followed properly by the staff and who will be monitoring the pathway variances? This is an important aspect to achieve the goals and improve outcomes (Every, Hochman, Becker Kopecky & Cannon, 2000).

Interestingly different studies across the world (Every et al., 2000; Pace, Sakulkoo, Hoffart, & Cobb, 2002) have found that the documentation burden has decreased because of introducing pathway in healthcare settings. It is due to the fact that care guidelines in pathway are specified for each day which is organized by categories and specific item on the pathway are covered by routine orders. Moreover, the clinical pathway replaces the physician progress notes and the nursing care plan, but it does not replace the physician order (Parsons, Murdaugh, & O'Rourke, 1998).

Various studies from developed countries (Kwan, Hand, Dennis, & Sandercock, 2004; Rotter et al., 2010; Sternberg, 2007; Sulch, Evans, Melbourn, & Kalra, 2002) found that implementation of stroke clinical pathway has improved the compliance and quality of documentation. Similarly, Study conducted on Australian nurses regarding their perception about paediatric clinical pathway found that nurses liked clinical pathways because it saved their time and reduced documentation requirements but they also raised the issue that there is a need for staff education regarding pathway utilization (Roberts, Boldy, & Robertson, 2005). From developing country, a quasi-experimental study was conducted by Khowaja (2007), in Pakistan, reported that

documentation by physicians and nurses has improved because of Transurethral resection of prostate (TURP) pathway; however, this was not a direct study on documentation of pathway.

In contrast, different studies from developed countries (Johnston, 2006; Olajos-Clow, Szpiro, Julien, Minard, & Loughheed, 2009; Pace et al., 2002) revealed that documentation work has increased because of clinical pathway. A study by was conducted by Hempling and Adhikari (2005) in UK assessed the quality of documentation in orthopaedic pathway. They found that doctors were least following the pathway, nurses were inconsistent and physiotherapists were excellent. Further they found that several sections of pathway were not filled at all and very few were filled half way. Moreover, very few were able to mention date and sign the pathway.

It is important to note that all above studies have been conducted on different pathways and there is a limitation of GI bleed pathway.

Barriers of documentation in Clinical Pathway

Literature review reveals that only five studies have been conducted to identify the factors which hinder nurses and physicians documentation of pathway. As expected, all five studies have been conducted from developed countries. A study by Olajos-Clow et al., (2009), in Canada explored the healthcare providers' perceptions about barriers for asthma care pathway implementation. This study included physicians, nurses, respiratory therapists, and administrators as participants of the study. They found that length of pathway and lack of time was common barriers. Another triangulated research study from Canada by Hayes et al., (2010), revealed that the major reason for non-compliance with UGIB guidelines included lack of knowledge of nurses and physicians and limited belief in the value of guidelines.

Moreover, study by Pace et al., (2002) found that barriers to implement the congestive heart failure pathway were lack of individualization of care, increased risk of liability, increased documentation and decreased professional autonomy. On the other hand, study from Johnston (2006) study conducted in UK found that structure of integrated care pathway of stroke did not lend itself to easy documentation while nurses were the only participant in this study. Similarly, Claridge et al., (2005) explored the attitude of health

care professionals towards integrated care pathway. This study was conducted among six health care professionals including nurses, physicians, professions allied to medicine, a member of community health council and non-clinical managers. Findings of this study revealed that lack of time both to learn about integrated care pathway use and to actually use them properly during a busy shift was a major barrier among them.

In contrast to above studies, nothing studied from developing countries and not specifically focused on nurses and physicians to identify the barriers of documentation in GI pathway.

Conclusion and Recommendation:

After reviewing the literature, it has been analyzed that various studies have been conducted from developed countries on different pathway like TURP, stroke, orthopaedic, surgery and GI but very limited study has been done from developing countries including Pakistan. Although few studies have found the impact of GI bleed pathway on patient's length of stay, hospital cost and patient outcome; however, no direct study has been done to evaluate the impact of GI bleed pathway on documentation. Moreover, none of the study has been conducted to identify the factors affecting nurses and physicians documentation on GI bleed pathway. Hence, globally there is a gap in literature regarding physicians and nurses' practice towards documentation of GI bleed pathway.

Considering the limited data available on the phenomenon of interest, a basic level of study is needed to estimate the proportion of documentation by physician and nurses on GI bleed pathway. This will provide insight to the nurses, physicians and the management personal of health care settings regarding barriers of documentation in clinical pathway. Moreover, it will facilitate the management staff to develop and implement pertinent strategies to overcome the issue of managing GI bleed patients and to improve patients' quality of care.

Finally, it may lead to further research with the aim of improving documentation in pathway among nurses and physicians.

References:

- Cerulli, M.A. (2011). *Upper Gastrointestinal Bleeding*. Retrieved from <http://emedicine.medscape.com/article/187857-overview#a0101>

- Cheah, J. (2000). Development and implementation of a clinical pathway programme in an acute care general hospital in Singapore. *International Journal of Quality in Health care*, 12(5), 403-412.
- Claridge, T., Parker, P., & Cook, C. (2005). Investigating the attitudes of health-care Professionals towards the use of Integrated care pathways in a district general hospital: a thematic analysis of focus group discussion. *International Journal of care pathway*, 9, 57-66.
- Every, N. R., Hochman, J., Becker, R., Kopecky, S., & Cannon, C. P. (2000). Critical Pathway: A Review. *Journal of the American Heart Association*, 101, 461-465.
- Hayes, S. M., Murray, S., Dupuis, M., Dawes, M., Hawes, I. A., & Barkun, A. N. (2010). Barriers to the implementation of practice guidelines in managing patients with non variceal upper gastrointestinal bleeding: A qualitative approach. *Canadian Journal of Gastroenterology*, 24(5), 289-296.
- Hempling, M., & Adhikari, A. (2005). Audit of fractured neck of femur integrated care pathway. *International Journal of care pathway*, 9(3), 106-108.
- Johnston, C. (2006). Up to the job? Auditing to assess the adequacy of an established ICP. *International Journal of care pathway*, 10(1), 13-16.
- Khawaja, K. (2007). Utilization of King's interacting systems framework and theory of goal attainment with new multidisciplinary model: clinical pathway. *Australian Journal of Advanced Nursing*, 24(2), 44-50.
- Kuzma, J. W., & Bohlenblust, S. E. (2004). *Basic statistics for the health sciences*. (4thed.). New York: McGraw Hill.
- Kwan, J., Hand, P., Dennis, M., & Sandercock, P. (2004). Effects of introducing an integrated care pathway in an acute stroke unit. *Age and Ageing* 2004, 33(4), 362-367.
- Mumtaz, K., Kamani, L., Hamid, S., Abid, S., Shah, H. A., & Jafri, W. (2011). Impact of a bleeding care pathway in the management of acute upper Gastrointestinal bleeding. *Indian Journal of Gastroenterology*, 30(2), 72-77.
- Olajos-Clow, J., Szpiro, K., Julien, B., Minard, J., & Loughheed, M. D. (2009). Emergency Department adult asthma care pathway: healthcare providers' perceived utility and barriers to implementation. *Advanced Emergency Nursing Journal*, 31(1), 44-53.
- Pace, K. B., Sakulkoo, S., Hoffart, N., & Cobb, A. K. (2002). Barriers to Successful Implementation of a Clinical Pathway for CHF. *Journal for Healthcare Quality*, 24(5), 32-38.
- Parsons, M.L., Murdaugh, C.L., & O'Rourke, R.A. (1998). *Interdisciplinary case studies in Health care redesign. Stages for improving patient care*. Aspen publisher, USA.
- Pfau, P. R., Cooper, G. S., Carlson, M. D., Chak, A., Sivak, M. V., Gonet, J. A., ... Wong, R. C. K. (2004). Success and Shortcomings of a Clinical Care Pathway in the management of Acute Nonvariceal Upper Gastrointestinal Bleeding. *The American Journal of Gastroenterology*, 99, 425-431.
- Podila, P. V., Ben-Menachem, T., Batra, S. K., Oruganti, N., Posa, P., & Fogel, R. (2001) Managing patients with acute, nonvariceal gastrointestinal hemorrhage: development and effectiveness of a clinical care pathway. *The American Journal of Gastroenterology*, 96, 208-219
- Roberts, P., Boldy, D., & Robertson, J. (2005). Use and development of clinical pathways by registered nurses in an acute paediatric setting. *Collegian*, 12(4), 22-8.
- Rotter, T., Kinsman, L., James, E. L., Machotta, A., Gothe, H., Willis, J., ... Kugler, J. (2010). Clinical pathways: effects on professional practice, patient outcomes, length of stay and hospital costs. *Cochrane Database of Systematic Reviews*, 3, Art. No. CD006632. doi: 10.1002/14651858.CD006632.pub2.
- Sternberg, S. (2007). *Influence of stroke clinical pathway on documentation*. Clemson University, USA
- Sulch, D., Evans, A., Melbourn, A., & Kalra, L. (2002). Does an integrated care pathway improve processes of care in stroke rehabilitation? A randomized control trial. *Age and ageing*, 31, 175-179.
- Vanhaecht, K., Panella, M., Zelm, R. V., & Sermeus, S. (2010). An overview of the history and concept of care pathways as complex interventions. *International Journal of care pathway*, 14, 117-123.