

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/apme

Quality in Health

A review of the total knee replacement pathway: Integrated care is quality care



Shipra Gupta ^a, Gaurav Loria ^{b,*}, Nipun Choudhry ^c

^a Manager, Quality Systems, Apollo Health City, India

^b Group Coordinator, Quality Systems, Apollo Hospitals, India

^c Dy. Chief Medical Administrator, Indraprastha Apollo Hospitals, Sarita Vihar, New Delhi, India

ARTICLE INFO

Article history:

Received 18 November 2014

Accepted 19 November 2014

Available online 17 December 2014

Keywords:

TKR

Quality care

Prophylaxis

ABSTRACT

A Total Knee Replacement (TKR) Pathway (adapted from the Credit Valley Hospital, Canada) is in place at the Apollo Health city facility since 2011. We re-visited the pathway design and the priority grid that led to its adaptation. We analyzed the data with the aim to analyze repetitive and unique trends and evaluate the performance of the pathway. Even with the increased volume the patient satisfaction rose from 56% at the time of pathway implementation to 77% at the end of the evaluation period of 45 months. The Average Length of Stay reduced by 27% from 7.94 to 5.78 days (the difference between the initial and final recorded values), in the same evaluation time period. The methodology of evaluation of the pathway was adapted from the Leuven Clinical Pathway Compass 5 way approach.⁹

Copyright © 2014, Indraprastha Medical Corporation Ltd. All rights reserved.

1. Introduction

The health care industry is at an inflection point. The amalgamation of Clinical best practices (e.g. Goal based patient care approach) with management techniques of improving efficiency, will lead to higher standards of care. It is estimated that every year the United States sees 44,000 and 98,000 people negatively affected from medical errors.¹

The Integrated Care Pathways (ICP's) are good examples of standard guidelines which match the needs of the local population, based on the best practices and learning from the experience of individual patients. Additionally, ICP's records the deviation in care from the planned care in the form of variances.²

Health care systems are prone to variation. Trends in the industry are often evidence based, each patient being different, medical evidence is not widely documented or standardized and the most important fact that treatment process is riddled with uncertainties.^{3–8}

61% of patient hospitals admit in the Low and Middle Income countries which include India covered their hospitalization cost out of their own pocket (WHO Database, Global Health Expenditure Database, 2012). This puts immense cost burdens on patients who undergo treatments especially surgeries. The best alternative which addresses the concerns of costs and quality are again, Integrated Care Pathways.

This article aims to highlight a case of the Total Knee Replacement Pathway implementation at a super-specialty setup. The article covers why the pathway was

* Corresponding author.

E-mail address: gaurav_l@apollohospitals.com (G. Loria).

<http://dx.doi.org/10.1016/j.apme.2014.11.007>

0976-0016/Copyright © 2014, Indraprastha Medical Corporation Ltd. All rights reserved.

implemented, what were the steps taken to ensure it was accepted by the clinical care providers and an analysis of what were the results of it.

1.1. Objectives of a surgical clinical pathway⁸

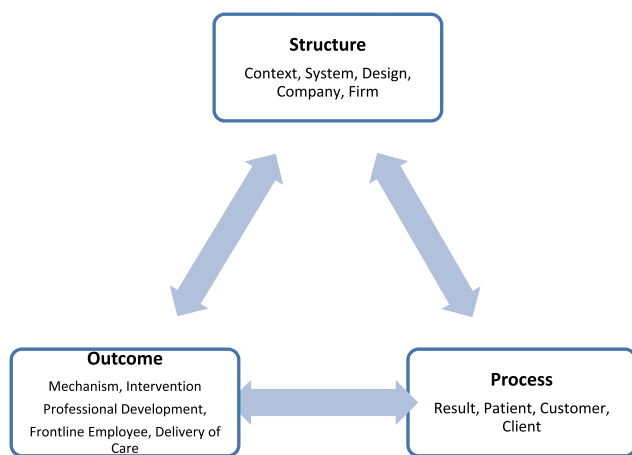
1. Selecting a treatment plan which the majority of Care-plan implementers follow and abide by.
2. Clear responsibility segregation at each level of care thus defining measurable parameters for example Average Length of Stay.
3. Defining goals at each care level which helps in role-awareness and keeping the patient and the family attendants on the same page.
4. Collection and analysis of data and trend, which help in continuous improvement with updated patient condition logs.
5. Consolidating information in a standard format helps the staff understand the goal-based approach of treatment and their role.

We analyzed the Total Knee Replacement pathway at Apollo Health City, which was implemented in the year 2011. Our objective was to analyze whether the pathway was fulfilling the above objects in sufficient measure.

1.2. Clinical pathway development

The care process organization triangle (based on Donabedian and including the terminology used by Pawson & Tilley, Mitchell, Batalden, Heskett et al, and Teboul).

According to the above paradigm, the solution which results is based on which situations are most conducive for the working of a particular organization.^{19,20,21,22}



Based on the above methodology the answers to the following were to be determined:

1. To assess the differences in perceptions of the Health Care providers on the care protocols.
2. To access whether the care process supported by the pathway will yield to a better implementation and documentation compliance.

3. To assess the specific parameters which would rate the efficacy of the pathway be compliant.

A survey was conducted among the Doctors and Nurses (Total N = 35) of the Orthopedics department, where the following were determined. Based on the survey conducted among the healthcare providers the following were the results:

1. A clinical pathway being interdisciplinary the involvement of all care providers was essential.
2. The Structure of the pathway would require the most deliberation, once in place it needs a trial run to test for its working.
3. The Context and the design of the program would require situations specific to the health care setup for example: Patients suffering from chronic knee pain pre-operation suddenly may feel the urge to quickly ambulate, where early mobilization is aided.
4. The process needs to be a structured one, with due weightage for complications example Surgical Site Infections (SSI's) and Deep Vein Thrombosis (DVT) prophylaxis were to be assessed at all care levels with an impetus on Infection Control.

The Total Knee Replacement Pathway was adapted from the Credit Valley Hospital, Canada. The implementation of the pathway was done following the steps:

1. Followed an Evidence-based Method was used to examine the gaps in our care process analyzing health care data.
2. Involving a multidisciplinary team to cater to the different aspects of care (Surgeon, Anesthetists, Nurses, Dietitians, Physiotherapist, Social Worker and as need be others).
3. Defining the patients who would fulfill the criteria.
4. Review practices and modify the base document based on our practices and patient mix.
5. Development and Pilot run of the Pathway.
6. Ongoing evaluation.

1.3. Selection of indicators^{10,17,18}

The scoring on a priority grid helped us identify the importance of implementing a pathway using the following parameters:

1. Patient population affected – This was done by identifying the patient volumes which would benefit from a pathway implementation.
2. Relevance to identified patient population, diagnosis, disease – Since a surgery involves high involvement in the patient care plan and the hospital stay is affected by the process.
3. Resources available to provide care – Being a tertiary care setup and skilled surgical teams place us on the favorable end of patient choice spectrum.
4. Patient Risk – Based on the patient in-flow how many patients will benefit immensely from the pathway being in place.
5. Patient Outcome – As a direct reflection of patients being at the epicenter of the care process.
6. Cost to implement – Any factors which directly improve patient care, without escalating costs of implementation beyond the cost-benefit grid.

Download English Version:

<https://daneshyari.com/en/article/3235027>

Download Persian Version:

<https://daneshyari.com/article/3235027>

[Daneshyari.com](https://daneshyari.com)