



Swedish Science Pioneers  
Developing World Journal Series

**Journal of Clinical Research & Governance**

www.jcrg.sciencepub.se



Letter to editor

**Using Tracer Methodology in Clinical Setting and Research to Measure and Improve Quality**

Quality in healthcare systems is defined from different viewpoints and there are many methods to measure quality in health care[1,2]. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) In 2004 used a new and highly improved accreditation process: Shared Vision—New Pathways, as a “tracer methodology”[3]. The tracer methodology is a significant component of the improved accreditation process, providing a framework for Joint Commission assessor to assess compliance with standards of care during on-site surveys. This process means that assessor spends more time observing the direct care[4]. In the tracer methodology, the assessor chooses a patient and use that medical record as a roadmap to evaluate the care delivered by the healthcare system. This includes not only the patient services but also the interaction of sectors,

programs, and functions throughout the healthcare system[5].

During tracer methodology evaluation, the following areas surveyed:

- Eligibility with Joint Commission International (JCI) standards and National Patient Safety objectives
- Consistent subordination to organization policy and consistent implementation of procedures
- Communication within and between sectors/programs/services
- Employment ability for doing tasks and workload capacity

The physical environment as it relates to the safety of patients, visitors, and staff[6].

Table 1- some of studies conducted using “Tracer Methodology”

References	country	title	field	Aim of study
Joanne Egges and et al[9], 1980	U.S	Evaluation of an EMS Regional Referral System Using a Tracer Methodology	Burns, multiple trauma, headtrauma, spinal cord injury, and low birth weight infants	to evaluate the EMS regional referral system
Durán-Arenas and et al[10], 2012	México.	The use of the tracer methodology to assess the quality of care for patients enrolled in Medical Insurance for a New Generation	All the medical units Delivering health services to enrollees of the Seguro Popular In Mexico.	To assess the quality of care provided at medical units that provide services
Wisdom and et al[11], 2012	U.S	New York's Outpatient Mental Health Clinic Licensing Reform: Using Tracer Methodology to Improve Service Quality	Outpatient Mental Health	Redesigning and implementing the clinic licensing system in New York State Using Tracer Methodology to Improve Service Quality.
Lai and et al[12], 2003	Canada	The prevalence of Parkinson's disease in British Columbia, Canada, estimated by using drug tracer methodology	Parkinson's disease (PD)	Estimate the prevalence of Parkinson's disease (PD) utilizing the prescription database of the College of Pharmacists.
Novick and et al[13], 1976	Canada	Assessment of ambulatory care: application of the tracer methodology	ambulatory care- pediatric clinic	Utilizing a tracer method in the assessment of care in a pediatric clinic

**Steps of tracer methodology:**

1. Team making, educating team members
2. Planning tracer process
3. Implementing the tracers
4. Using and understanding data from tracers
5. Determining and implementing improvements based on tracer data
6. Retracing the steps[8].

In recent years many studies conducted using tracer methodology in clinical setting, some of these studies are summarized in Table 1.

As can be seen in Table 1, tracer methodology has been used in different areas and goals of clinical setting and research. In conclusion, Tracer methodology is a flexible and effective

**Types of Tracers:**

Individual tracers: Individual tracer, usually contents observing care, treatment, or services and associated processes; reviewing all medical records related to patients, treatment, or services and other processes, as well as survey other documents; and interviewing staff.

System tracers: this tracer relates to a high-risk system or the processes in an organization. Currently, three topics are evaluated during the on-site assessment using this approach: medication management, infection control, and data management.

Program-specific tracers: In these tracers focus on specific pertinent to a particular accreditation program and the associated care, treatment, or service processes. These processes are evaluated using the experience of patients who has needed for the organization's care, treatment, or services[7].

management tool that allows an organization to assess and closely examine its systems and process of care delivery and also the planning to improve the quality. Moreover, this method can be implemented in accreditation and clinical governance programs.

Saber Azami-Aghdash, Reza Mohammadi  
Department of Public Health Sciences, Karolinska Institute,  
Norrbacka, 2nd floor  
SE 171 76  
Stockholm, Sweden  
Corresponding Author:  
Tel: +46735905877  
Fax: +46852480138  
Email: Reza.mohammadi@ki.se

References:

1. Tabrizi JS, Wilson AJ, Gholipour K: Comparing Technical Quality Assessment Methods for Measuring Quality of Healthcare: Systematic Review. *Journal of Clinical Research & Governance* 2012,1:3-11.
2. Azami-Aghdash S, Ghaffari S, Sadeghi-Bazargani H, Tabrizi JS, Yagoubi A, Naghavi-Behzad M: Developing Indicators of Service Quality Provided for Cardiovascular Patients Hospitalized in Cardiac Care Unit. *Journal of Cardiovascular and Thoracic Research* 2013,5(1):23-8.
3. The Launch of Shared Visions—New Pathways. January 2004. [<http://www.jcaho.org/accredited+organizations/svnp/jcp-2004-january.pdf> Accessed June 23, 2004.]
4. Murphy-Knoll L: Nurses and the Joint Commission Tracer Methodology. *J Nurs Care Qual* 2006, 21(1):5-7.
5. Joint Commission on Accreditation of Healthcare Organizations. *The Source*; 2004,2(1).
6. The Joint Commission Survey (Part 1): Maximizing Tracer Activities – A Dialogue with Surveyors; 2006.
7. Tracer methodology. [at: [http://www.jcaho.org/accredited+organizations/svnp/svnp+qa\\_tracer+methodology.htm](http://www.jcaho.org/accredited+organizations/svnp/svnp+qa_tracer+methodology.htm).]
8. Halvorsen M, Pejakovich P: *Tracer Methodology: Frontline Strategies to Prepare Your Organization for Jcaho Survey*. Stevens M, editor. USA: HCPro; 2008.
9. Egges J, Turnock BJ: Evaluation of an EMS regional referral system using a tracer methodology. *Ann Emerg Med* 1980, 9:518-23.
10. Durán-Arenas L, Nofre Muñoz-Hernández O, Hernández-Ramírez LC, Jasso-Gutiérrez L, Flores S, Aldaz-Rodríguez V, et al: The use of the tracer methodology to assess the quality of care for patients enrolled in Medical Insurance for a New Generation. *Salud Publica Mex* 2012, 54(1):50-6.
11. Wisdom JP, Knapik S, Holley MW, Van Bramer J, Sederer LI, Essock SM: New York's Outpatient Mental Health Clinic Licensing Reform: Using Tracer Methodology to Improve Service Quality. *Psychiatric Services* 2012, 63:418-20.
12. Laia BCL, Schulzerb M, Marionc S, Teschkec K, Tsui JKC: The prevalence of Parkinson's disease in British Columbia, Canada, estimated by using drug tracer methodology. *Parkinsonism and Related Disorders* 2003, 9:233-8.
13. Novick L, Dickinson K, Asnes R, Lan S, Lowenstein R: Assessment of ambulatory care: application of the tracer methodology. *Med Care* 1976, 14(1):1-12.