

Editorial Note

Quality Improvement ... Provision of Uniform Quality Care

Dr Bakul Jayant Parekh

Author's Affiliation:

1- National President IAP, 2020

Correspondence:

Dr Bakul Jayant Parekh, Email: bakulparekh55@gmail.com

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Safety of patients and quality of healthcare are of utmost importance for us the healthcare providers. In our earlier article published in Indian Pediatrics, Rhishikesh Thakre and I define healthcare quality as “having safety, effectivity, patient-centeredness, timeliness, efficiency, and equitability” (1). So, patient safety and health care quality are both inter-linked. A gap is present between, what healthcare providers actually do and that what is possible for us to endeavour, and an auspicious outcome depends on multiple factors, the healthcare provider's competence is only one of them (2). Improving our patient health care requires that our methods understand the process and enhance the structure of systems at the workplace. Healthcare providers must be richly competent in their skills regarding quality improvement (QI). QI is actually the science for improving via a system-based approach.

QI - Science of Improvement

QI is an intended, well-formulated way towards problem-solving in domains of medical practice. Multiple frameworks are designed to meet this target. A point of care quality improvement (POCQI) module (3) explains it using following four steps – 1) Identifying the problem, making a team of all those involved, and forming a SMART aim statement - *specific* (who and what?), *measurable* (how much change do we expect?), *achievable, realistic* (is success possible given the resources and setting?), and *time-bound* (within specified timeline). 2) Identify the cause of the problem using tools (eg. Cause and effect analysis (Fig 1), process mapping (Fig 2), Pareto principle (Fig 3), and or 5 Why's (fig 4) and define indicators for measurement (process or outcome). We plot the data using run charts or control charts, giving an impression of change over time. 3) Brainstorming the team to develop ideas for change and test one idea at a time, utilizing Plan, Do, Study, Act (PDSA) cycle. On analysis, idea will be either adopted, adapted, or abandoned. Such frequent idea testing using the PDSA cycle leads to visible improvement changes onsite and engages the provider to set new benchmarks. 4) Sustaining the change, take specific steps to prevent slip back and share the experience with other departments.

It will be an over-whelming experience for the pediatrician, to be involved in a prosperous and persistent QI project can be an. Motivational inspiration, synergistic work, statistics, and leadership are key elements for success in QI projects. In short, QI is “plan for your task and then perform task as per your plan” and discover superior direction of performing tasks consistently.

Problem: HYPOTHERMIA

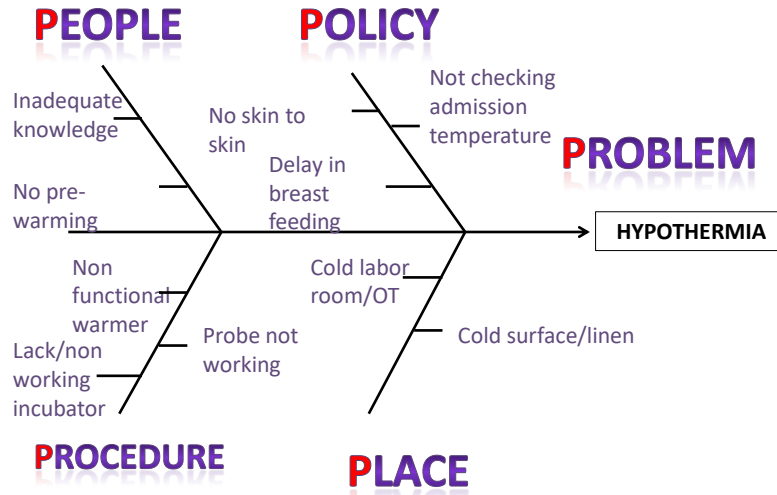


Fig 1. Analyzing the problem of newborn hypothermia using cause and effect analysis focusing on issues related to people, place, procedure, and policy in the delivery room.

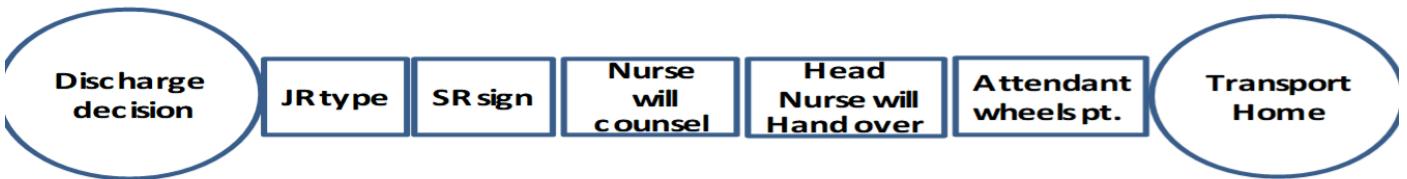


Fig 2. Applying flow process mapping for discharge of a patient from the ward

Example: Medication error

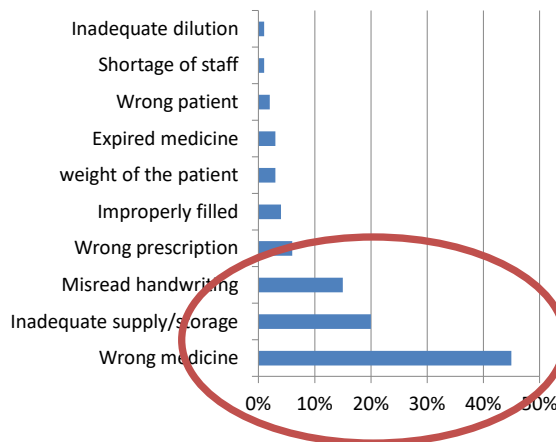


Fig 3. Using the Pareto principle for medication errors. 80% of problems due to 20% of causes

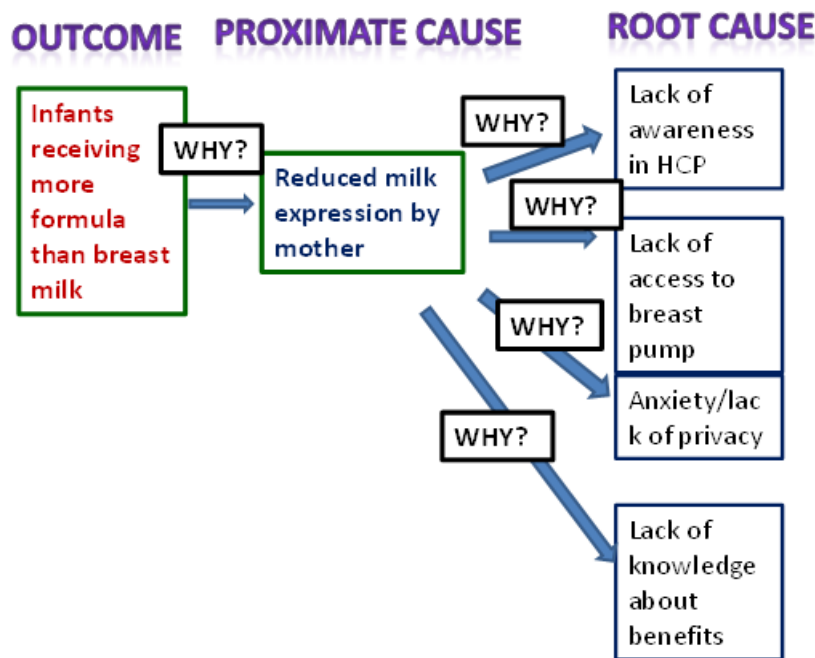


Fig 4. Applying 5 Why's to solve the problem of infants receiving less breast milk in the nursery.

QI and Pediatric Care

There has been growing interest in quality improvement in pediatrics encompassing the spectrum of care affecting short-term and long-term conditions (e.g., asthma, seizures, diabetes mellitus, hyperactivity disorder, gastroenteritis, infections, errors in pharmaco-therapeutics, etc.), indoors and outdoor departments, intensive care modalities (e.g., good care of central line, reduction in hospital acquired infections, enhanced hand hygiene, reduction in antibiotics usage, etc.) and day to day patient care (e.g., arraying of OPD patients, reduction in delay of admission, minimizing use of oxygen, promoting breastfeeding practices, encourage follow ups, etc.) across centers of all levels using QI tools, checklists, bundles packages, and multicentric collaboration. This has led to empowering the processes - adhering to guidelines, services delivery at a constant rate, minimizing variations, reducing delays, abolishing inefficient processes, and facilitated outcomes - lowered costs for patients, reduced stay in hospital, better survival, and increased satisfaction of patient. The most appropriate set consisting of 175 QI for pediatric therapy was published in the USA (4). COSI-PPC-EU represents a consented set of 42 valid quality indicators for pediatric care (5). There is a quest to develop India-specific markers to look after, compare, and improvise practices across variable sites and situations.

The Way Forward

APPA is committed to developing region-wise standards for pediatric services and training. APPA recommends support and encourages the movement for QI. The vision and mission are to recognize a basic pannel of quality indicators in pediatrics out of following five strata: prevention, short-term care, long-term care, regulation of practices, and safety of patient in basic health care. The point of care in standardizing the formation, procedures, and results could uncover possibilities for enhancing neonatal, child, and adolescence healthcare all over the region. Via implementing and accepting QI, APPA, in collaboration with professional and social organizations (WHO, UNICEF, etc.), intends to develop an infrastructure consisting of of QI Coaches, mentors, and leaders who will teach, incite and stimulate QI uptake. A composite of modules based on web, learning with the help of workshops, and execution of projects will prepare the learner and support in facilitating the exercise of the art and science of QI. APPA is sensitized regarding the importance of QI as per its basic knowledge before implementation and would make its best effort to develop an infrastructure and necessary proficiencies for Quality, safety, and systems-targetted thought process in guiding and supporting our new generation pediatricians. We know that QI task is not a cup of tea and may be specially cumbersome because of the

obstacles existent in current system. All of us are responsible for our children and families to maintain and assure the unanimous right to highest-quality care. Let us make joint efforts and implement the science for betterment in our clinical care.

I acknowledge the help of my colleague Dr. Rhishikesh Thakre.

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