



Qimpro[®]
FOUNDATION

World Quality Month 2020 Celebration

Quality is never an accident it is always the result of intelligent effort...*John Ruskin*



Dr. Payal Puri
Deputy MS, SMO
Civil Hospital, Panchkula

Dr. Prachi Verma
Voluntary Researcher,
Civil Hospital, Panchkula





Civil Hospital, Panchkula



Accident & Emergency Department

**Implementation of Triage in the Paediatric
Emergency Department at a Secondary Care Public
Hospital: A Quality Improvement Initiative**

- The Accident & Emergency department is the most stressful and critical area of a hospital and plays a significant role in the success of the hospital.
- Effective Management of Paediatric patients along with the adults often becomes challenging in the Emergency department leading to overcrowding and delay of treatment which leads to unplanned referrals to tertiary care centres.
- Efficient management requires the right resources, processes, and consistency.
- Using a combination of technology, strategy, the secondary level hospitals can improve customer satisfaction , reduce the overcrowding and referral rates to tertiary care centres.

Civil hospital, Panchkula, a secondary care Government hospital took the initiative to implement paediatric triage in the Accident & Emergency department for timely recognition and intervention of sick children.

It aimed to prioritize treatment and planned referrals, thus easing burden on tertiary care hospitals and improving efficiency.

- The management of the hospital received frequent complaints regarding
 - *Missing information about paediatric patient status,*
 - *Delay in referrals to tertiary care, and*
 - *Unnecessary transfer of Paediatric patients to higher centres*

- **Project Category:** Non-Clinical
- **Methodology Used:** Agile Project Management (APM) Methodology, it helps the project team to focus on quicker iterations to increase efficiency.
- **Quality Improvement Tools:**
 - Flow charts were constructed to identify key steps of the project and for better understanding of the processes required to implement triage in the paediatric emergency patients.
 - A fish bone diagram was used to identify the problems at every step and simplify the procedures and improve them.

An “Agile” team was constituted to identify the existing problems, find solutions and implement them

The “Agile Team”



Team member	Qualification
Project officer	A Paediatrician (1) , MD Paediatrics
Invigilator	Hospital Administrator (2), MHA
Co-Invigilator	Emergency Medical Officer (2), MBBS
Data manager	Data Entry Operator (1)

To identify the problems at each step from the point of registration to inter department transfer /discharge/ referral of the paediatric patient.

The “Agile team” did a retrospective survey of the functioning of emergency department. The initial analysis revealed that out of total 1,486 paediatric patients (April 2018 to December 2018) initial assessment forms of 585 patients were incomplete and 574 patients received treatment after more than 30 minutes of registration.

It was found that the in-charge medical officer of the emergency, was responsible for filling an initial form which was common for both adult and paediatric patients to document the present condition of the patient.

This form helped the medical officers to decide the priority of treatment for the patients.

The Agile Team identified the following problems:

- *No established system of triaging both for the adult and the paediatric patients coming to the accident & emergency department.*
- *No specific area earmarked for prioritized patients.*
- *No structured specific format catering to the needs of paediatric patients. Important parameters were being missed out on the initial assessment.*
- **Staff was also not aware on the methods, process and importance of triaging.**

AGILE Team's Planning

- Established system for paediatric triage
- Triage receiving area was demarcated. And color coding of triage area .
- Medical officer (24x7) along with triage staff(triage nurse & EMT) was appointed at the triage receiving .
- A separate Paediatric Triage form.
- Development of a capacity building program (*conducted five times throughout the project*).

TRIAGING	
Red area	Critical Patients
Yellow Area	Priority Patients
Green Area	Stable Patients
Black Area	Patients with least priority

Initial problems Faced

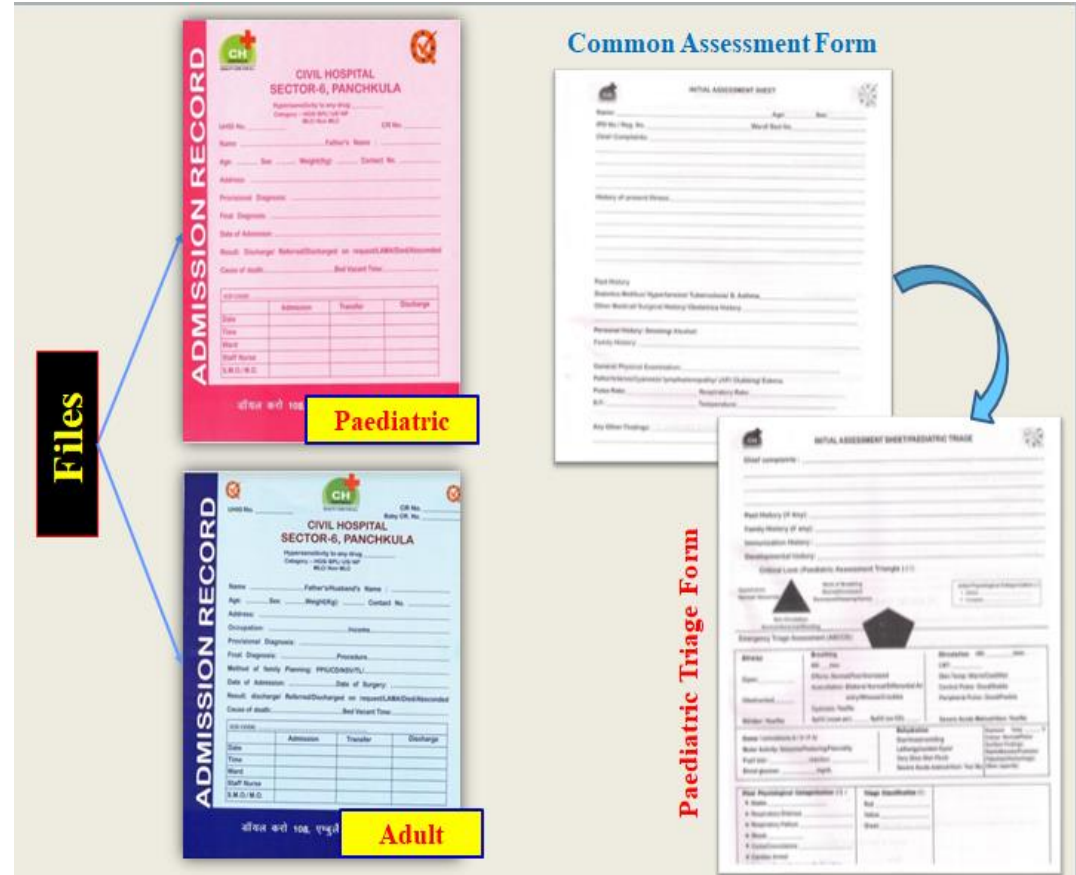
- Resistance by medical officers to fill the form. Paediatric triage forms were pasted in common files having adult parameters also .
- Moreover, the forms were missing from the files.
- After introduction of structured format of triaging only initial categorization was being done as few Major parameters like Random blood sugar, Glass-gow Coma Scale were still missing.

plans are nothing but Planning is everything

Agile team took feedback from triaging staff at frequent intervals and took corrective actions to resolve problems faced as follows :

- Continuous Monitoring ,Trainings and repeated meetings helped to enforce triaging.
- Nursing staff and Medical record department was asked not to accept any incomplete file.
- A weekly report was to be given to hospital in-charge for compliance.

- The positive results of triaging in paediatric patients have led to adoption of triaging in the adult patients and also for neonates.
- Hospital administration welcomed the required changes. Easy identification and for more comprehensive record maintenance a pink coloured file for short and long stay paediatric patients was introduced.

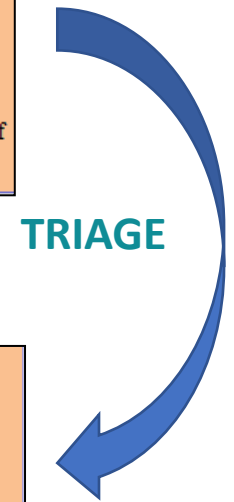
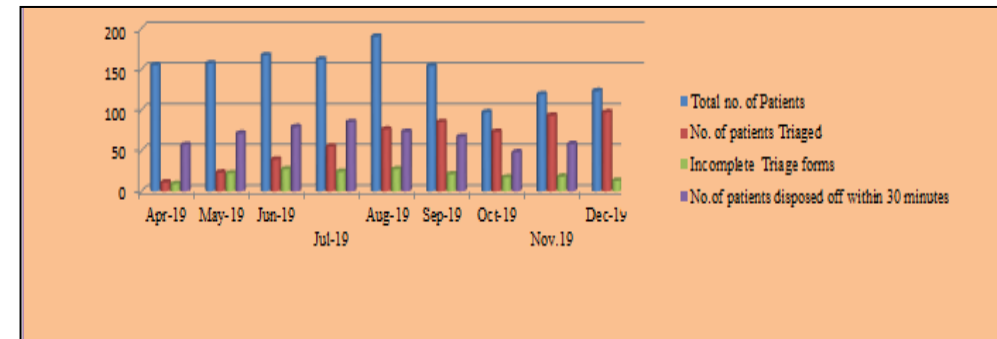
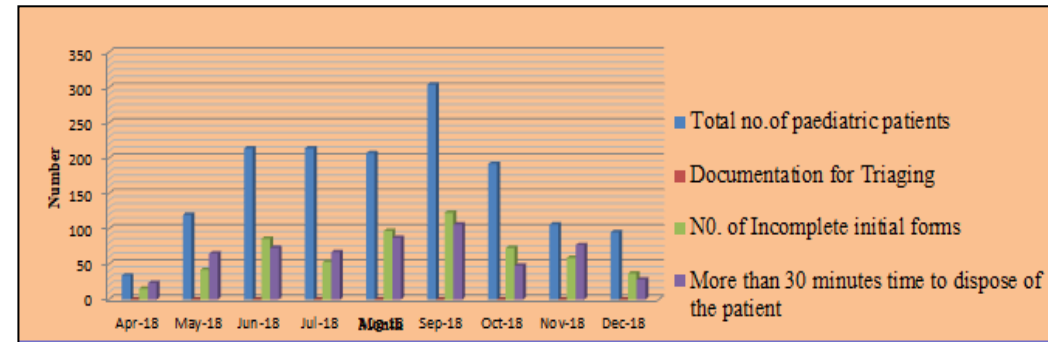


TANGIBLE RESULTS

A prospective study showed that acceptance of paediatric triage forms increased from **18.64 % to 78.6%**. The number of incomplete forms decreased from **81.8% to 10.56%**.

This increased the efficiency of the emergency department by

- faster patient assessment
- timely management and
- better documentation along with
- reduced referrals to tertiary care centres.



- Good team organization and coordination within the team members helped in achieving the desired results in less time.
- Adoption of agile methodology provided flexibility and helped in better decision making for speedy results.
- Regular meetings facilitated communication for good working relationships.
- Continuous monitoring improved the efficiency of the accident and emergency department.

THANK YOU

