

“Innovative Process Improvement Initiative”

Effective Adherence of Checklist through Digitalisation

Presented by Mr. Sridhar N



Kauvery Hospital Introduction



**1999
Tennur**



**2016
Hosur**



**2008
Trichy -
Specialty**



**2018
Salem**



**2010
Chennai**



**2020
Bangalore**



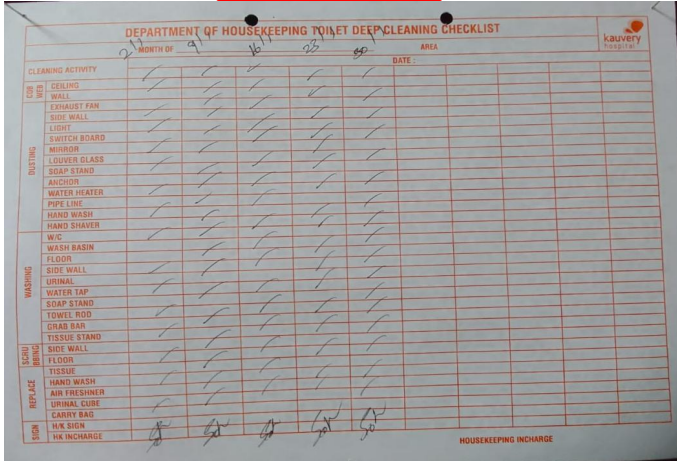
**2012
Trichy -
Heart City**



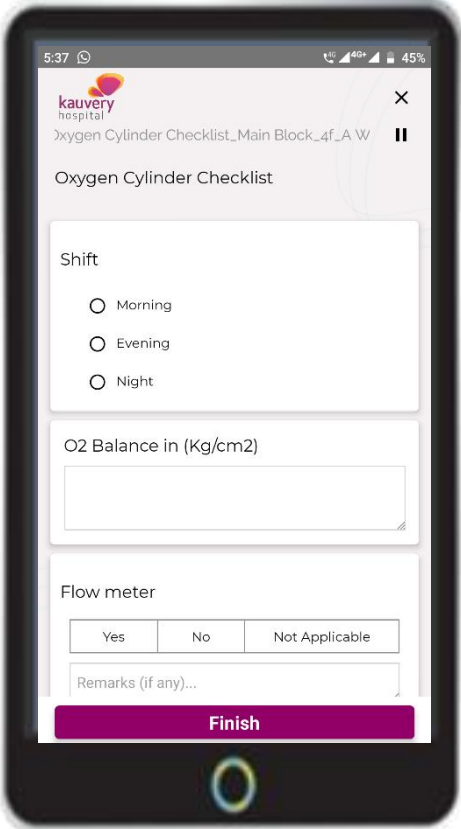
**2022
Tirunelveli**

Digitalization of Check list

Before



After



First Name	Last Name	Employee ID	Location	Division	Department	Created Date	Shift	O2 Balance in (Kg/cm2)	Flow meter	Working condition
STELLA MARY	T	113158	KCH	Nursing	Clinical Nursing	15/12/2021 11:20	Morning	500	Yes	Yes

- At Kauvery hospitals, we depend on Check lists for not only monitoring Statutory Compliances but also for ensuring all the floor Supervisors and staff work follow their daily routines and same is being recorded in the Checklists as an evidence of their work is completed.
- Since Kauvery Hospital has multi blocks with several departments and close to 1000 employees, managing the effective compliance of checklists has become a humongous task.
- The problem is, “Checklist would be available but whether the adequacy of the compliance of checklist is questionable”. Therefore to ensure the effectiveness and also to go with a evidence based approach our Digital Team developed the idea of using “**DIGITAL CHECKLIST**”.
- As a pilot study, Kauvery Hospital, Cantonment was initiated the process of using digitized checklists for two process,
 - ❖ O2 Cylinder Checklist
 - ❖ Washroom Cleaning Checklist
- It was implemented through using QR codes. On scanning the QR code in an internally developed app, the digital checklists with observations are documented.

Development of Best Practice

Process flow



List of Check Lists

- The requirements from the departments are listed out with clinical and non-clinical team

Department	Checklist
Nursing	<ul style="list-style-type: none"> • Refrigerator temperature monitoring checklist • Defibrillator checklist • Meat box checklist • Nursing grooming checklist
Maintenance	<ul style="list-style-type: none"> • O2 cylinder checklist • AC preventive maintenance checklist • RO tank – Daily checklist • Water dispenser – Daily checklist • DG checklist • Fire pump room checklist • Transformer checklist
Housekeeping	<ul style="list-style-type: none"> • Washroom cleaning checklist • Room cleaning checklist • Lift cleaning checklist •
HIC	<ul style="list-style-type: none"> • CAUTI checklist • VAP checklist • Hand hygiene monitoring checklist • Bio Medical Waste monitoring checklist
Quality	<ul style="list-style-type: none"> • Active Medical Records review checklist • Internal audit checklist • 5S Audit checklist
OT	<ul style="list-style-type: none"> • Surgical safety checklist • Temperature and Humidity monitoring checklist
Ambulance	<ul style="list-style-type: none"> • Ambulance Service checklist • Ambulance oxygen cylinder checklist
HR	<ul style="list-style-type: none"> • Grooming checklist

 Digitalized Checklists

Development of Best Practice

Implementation & Adherence

- The teams are encouraged to use the QR code through **training sessions and monitoring**.
- The **reports of the usage** of the QR code is through **daily automated mails** to in charges and through a **consolidated report**.
- The **consolidated report helps** in charges in concentrating the **areas of noncompliance**.
- The consolidated reports helps us in monitoring the **time of checklist completion** which enables the in charges to track the exact time of checklist completed. This system helps in **eliminating the manipulations** of the manual entry in traditional checklist.
- **Weekly meetings** for the teams from departments where digital checklist is implemented is done to **analyse the factors for noncompliance** and to create a culture of adherence at all levels.

Brainstorming with department in charge



Weekly Review meetings



QR Code implementation for digital checklist



Deployment of Best Practice

Encouraging department with high compliance rate

- Consistently the departments with highest adherence to the digital checklist were appreciated in various meetings like Operational Review Meeting (ORM) which is conducted daily and in Executive Council Meeting (ECM) conducted weekly

Motivating employees

- Always it is difficult to learn, DE learn and relearn. So the staff are motivated at all levels for system adherence. The merits of using a digital platform for data collection is inculcated to the supervisors and in charges

Survey

- A survey was conducted among the supervisors and in charges regarding the limitations and uses of the digital checklists. The results of the survey is analysed and improvement points were shared to the digital team for immediate action.

Making necessary improvements

- Based on the analysis of the data collected and also from the feedbacks from stakeholders, the necessary improvements to be implemented for smooth transition of the process

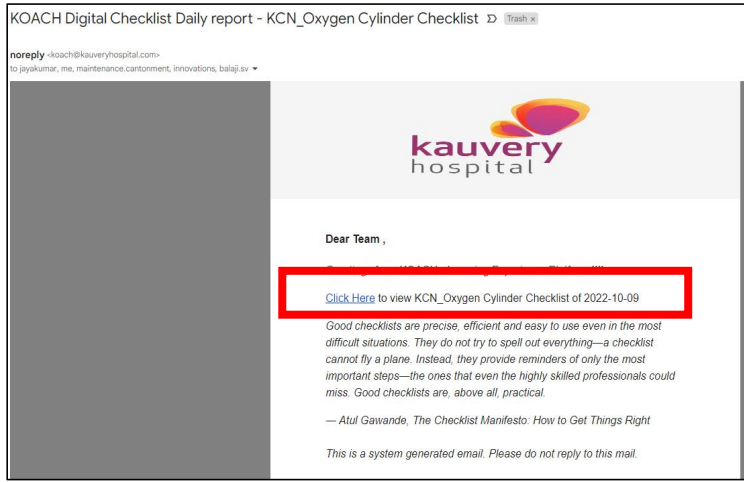
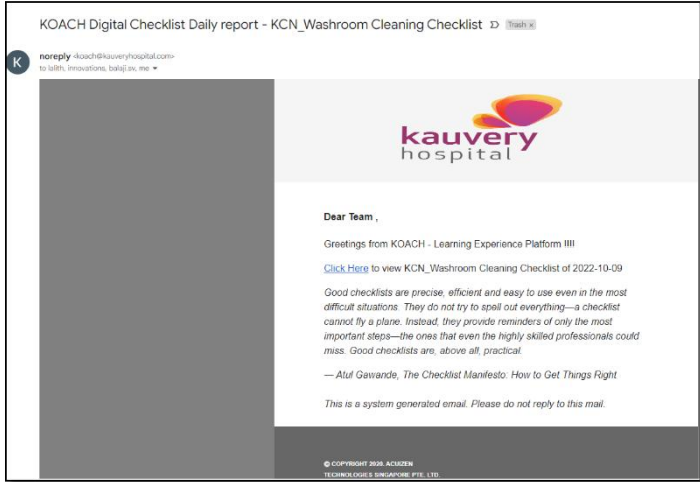
S.No	As a staff using QR code	Strongly Agree	Disagree	Strongly Disagree
1	Is QR code make my work easy			
2	Is QR code working at all times			
3	Are you trained on how to use QR code for digital checklist			
4	Are you aware of the reports of daily QR code checklists			
5	Do you know whom to contact in case you have a doubt regarding digital checklist			
6	Do you think digital checklist is easy than manual checklist			
7	Do you find any difficulty in scanning the QR code			
8	Do you think the app is working at all times			

Comments:

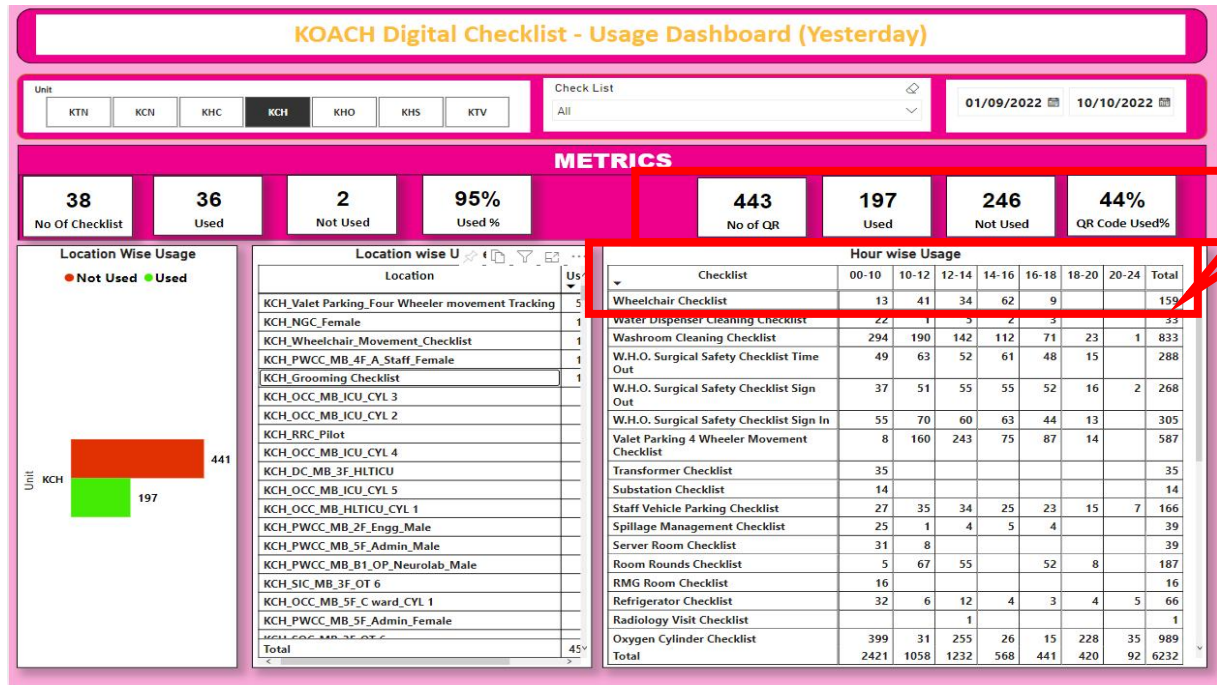
Employee Signature :
Employee No :

Monitoring System for capturing effectiveness of the Best Practice

Daily report in mail



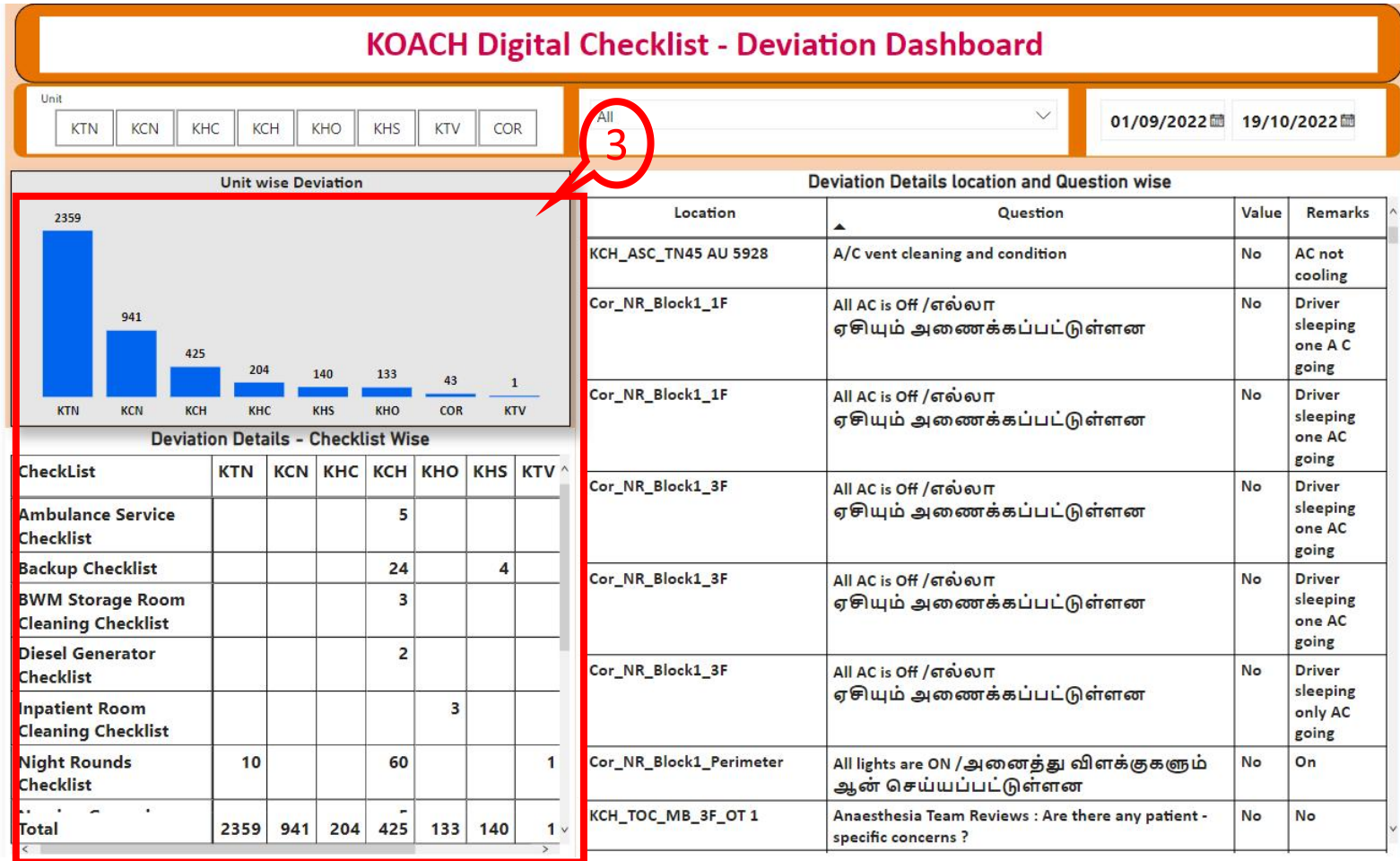
Consolidated Power Bi Report



- 1 - If work not done and Check list not completed as per defined frequency.
- 2 - Consolidated non Usage of Check list in our Unit

Monitoring System for capturing effectiveness of the Best Practice

Consolidated Power Bi Report

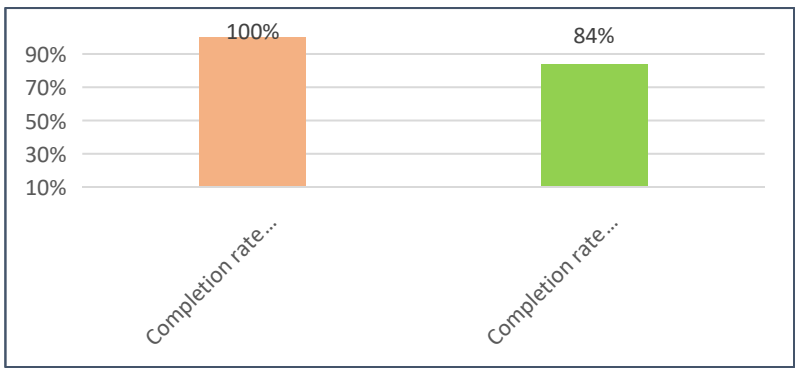


3 - If Work not done and Check list reflects the same, Reporting is done real time for Supervisors and Managers

Disruptive results achieved

Tangible

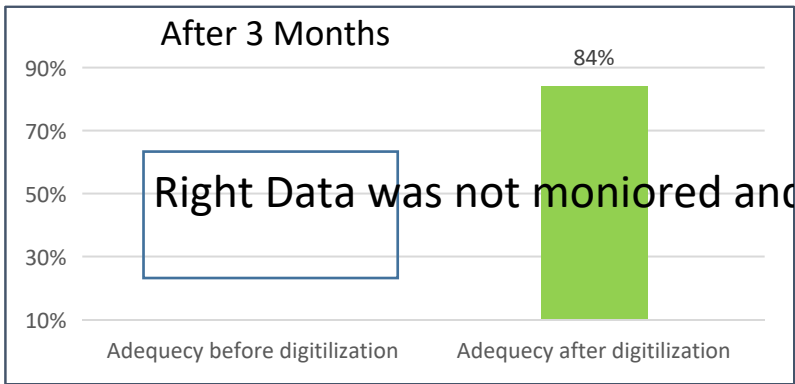
a) Percentage of completion rate of Check list



After 3 Months

- The Completion percentage was monitored through automated reports.

b) Adequacy of the Compliance



- The adequacy of the compliance is compared between various places of the checklists.
- Eg. Washrooms where digital checklists not used is easily identified for immediate action.
- Since completion checklist with time is send as report

Tangible

- c) **Through digitizing checklists, use of paper is considerable less. There is a scope of using digital checklists in many places which will further reduce the number of papers used:**
- At Present monthly usage of Approx. **200 papers** is eliminated due to Digitalisation of Checklist
- d) **Retrieval time of Records for Statutory audits, internal audits**
- Retrieval time of records during audits is made easy through online reports
 - At present, Since the reports are sent through automated emails all the data is readily available with the dept. in-charges.
 - Retrieval time of records is less than **20 seconds**

Disruptive results achieved

In Tangible

- **Transparency among within teams and cross functional teams** has been improved, interdepartmental issues such as non-completion of an activity but check list filled.
- **Customer complaints** due to missed activity is reduced
- Team members **morale**

Why is it a Best Practice?

Checklist are one of the **most overlooked Tools** cutting across industries.

Check-list are **very basic** but one of the **powerful tools** that has been practices around the world.

But the real world issue is that Checklists have become a **mere tick list** and for **regulatory and statutory audit** purposes.

Digital Checklist **improves the effectiveness multi fold.**

- **First and foremost reason is the replacement of Paper based checklists and transforming to paperless culture.**
- **Monitoring deviations in real time through consolidated report**
- **Adherence to time is monitored digitally**
- Anywhere at anytime we could simply use, using mobile phone
- Customisable
- **Cost effective**
- Created by in-house team
- Chance for error can be minimized
- Can focus on the area / time to be improved
- Improved Customer Experience and interdepartmental satisfaction
- Improved the adequacy of the checklists

Monitoring System for capturing effectiveness of the Best Practice

“The **monitoring system** helps us to identify **accurately** the **area of concern**. Real time data gives us the **consolidated report** in one place”



Mr. Sami Ayya
Gas Plant Operator,
Maintenance



Mr. Parthasarathi
Assistant Manager, Housekeeping

“**Taking images** of the work completed gives me the satisfaction of the **work done** rather than **checking each place** for completion”

“The success of the digital checklists truly inspire us to perform much better to move towards digital transformation ”

Mr. P. Jayakumar
DGM - Operations



Testimonials from Frontline Staff

“ After Implementation of Digital Checklists, our work activities has become effective, since all the activities are evidenced in the digitalized version. This has help us to eliminate complaints and encourage us for delivering excellence in our work”



Ms. Jenifer
House Keeping Staff



Thank You