# Impact of implementation of 'Kayakalp' initiative on Quality certification of public health facilities to National Quality Assurance Standards

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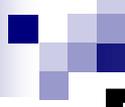
# Preface

- Introduction
- Literature Review
- Objectives
- Methodology
- Limitations of the study
- Data Analysis
- Result
- Discussion
- Conclusion
- Recommendations
- References

# INTRODUCTION

## What is Quality of Care?

Different cadre of people

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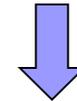
Different Perception

**Ultimate goal**

Desired Health Outcomes
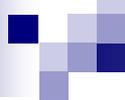
# Key initiatives taken by the Government of India:

- Indian Public Health Standards, 2007

- State initiative like NABH, ISO 9001:2008, Family Friendly Hospital Initiative (FFHI), 2008-12

- National Quality Framework (National Quality Assurance Standards), 2013

- Kayakalp, 2015

# LITERATURE REVIEW

- More than 43 million people worldwide suffered due to medical mishaps

- In India around 5.2 million injuries occur due to medical negligence

- Every 100 hospitalization average 12.7 adverse event occurs

- Poor Quality of Health-care service was responsible factor

# Major Quality Improvement Programs in the Past

| Study area | Program Implemented | Ultimate Outcome |
|---|---|---|
| Uganda, 1994 | Implementation of National Quality assurance program to strengthen primary health care services | Within 18 months, reduction in maternal mortality ratio, waiting time and increased patient satisfaction |
| Guinea and Kenya | Client-Oriented, Provider-Efficient Services (COPE) | Enhanced and satisfactory quality of services to children and their caregiver |
| Delhi Hospitals & Dispensaries | Centralized pooled procurement system and rational use of drugs | 30% reduction on annual drug bill, improved approx. 80% availability of drugs |
| Uganda | Scaling up Integrated Management of Child Illness | Quality of care and services increased and reduced infant mortality rate |
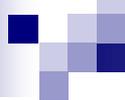
# OBJECTIVES

## General Objective-

To assess Impact of implementation of 'Kayakalp' initiative on Quality certification of public health facilities to National Quality Assurance Standards

## Specific Objective-

1. To assess the co-relation between NQAP and Kayakalp's external assessment score for National Quality Assurance Standard (NQAS) certified district hospitals.

2. To analyze the coverage of certification of public health facilities under NQAP and Kayakalp programme.

3. To do a comparison of NQAS assessment score between quality certified district hospitals and deferred quality certified district hospital under NQAS.

# METHODOLOGY

- A retrospective study was conducted using quantitative method

- Study period was from February to April 2018

- Purposive sampling technique was used.

- Data entry was done in SPSS 22 and MS Excel 2016.

- Sample Size as per Specific Objective

| Specific Objective | Variable | Sample Size |
|---|---|---|
| 1. | Certified DH under NQAS | 32 |
| 2. | No of facilities for coverage under NQAS & Kayakalp | |
| | DH/SDH | 1108 |
| | CHC | 5624 |
| | PHC | 25650 |
| | | **(As per RHS 2017)** |
| 3. | Deferred/Declined DH under NQAS | 06 |

- Source of Data: Record Review from last 3 years data (May 2015-April 2018)

# LIMITATIONS OF THE STUDY

• As both the programmes are in their expansion phase, sample size was small.

• Data collection was difficult as assessment checklist have to be collected from respective states of the facility.

• Confidentiality and Privacy issue within the organization regarding declaration of certification of the facility under NQAS.

• Only certified district hospitals were included because of time constraint

# DATA ANALYSIS AND RESULT

Specific Objective 1.

- Kayakalp External Assessment (EA) score is "Independent variable" & NQAS EA score is "Dependent Variable"

| Correlations | | NQAS Score | Kayakalp Score |
|---|---|---|---|
| NQAS Score | Pearson Correlation | 1 | .217 |
| | Sig. (2-tailed) | | .234 |
| | N | 32 | 32 |
| Kayakalp Score | Pearson Correlation | .217 | 1 |
| | Sig. (2-tailed) | .234 | |
| | N | 32 | 32 |

- Generate null hypothesis, there is no correlation between two programmes

- Pearson co-relation coefficient was 0.217

- There was co-relation between these two Quality of Care programme but of weak strength

# Scatter-plot chart
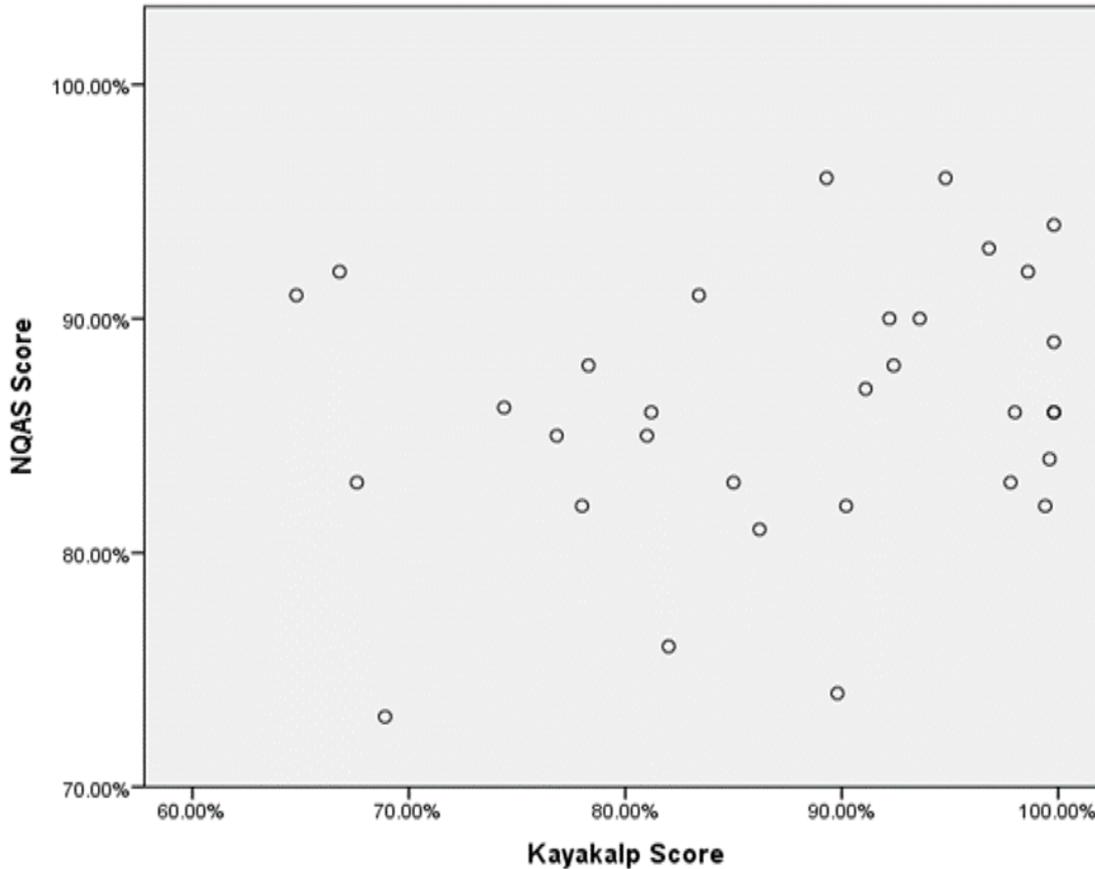


- Non-linear relationship between two variables
- Accept Null hypothesis which says no correlation.

## Specific Objective 2.

- Criteria for selection- National Quality Assurance Standard (NQAS) Certified facilities for NQAS coverage
- Public health facilities certified under NQAS since the inception of programme in November 2014' till April 2014

- Criteria for selection- Facilities scored ≥ 70% in EA under Kayakalp coverage
- Progressive increase in the coverage of facilities since inception of programme in May 2015

**Percentage of Public Health Facilities Scoring 70% and above under Kayakalp**

| Facility | 2015-2016 | 2016-2017 | 2017-2018 |
|----------|-----------|-----------|-----------|
| PHC | | 4.4 | 8.34 |
| SDH/CHC | | 6 | 13.34 |
| DHs | 14.6 | 17.69 | 31.71 |
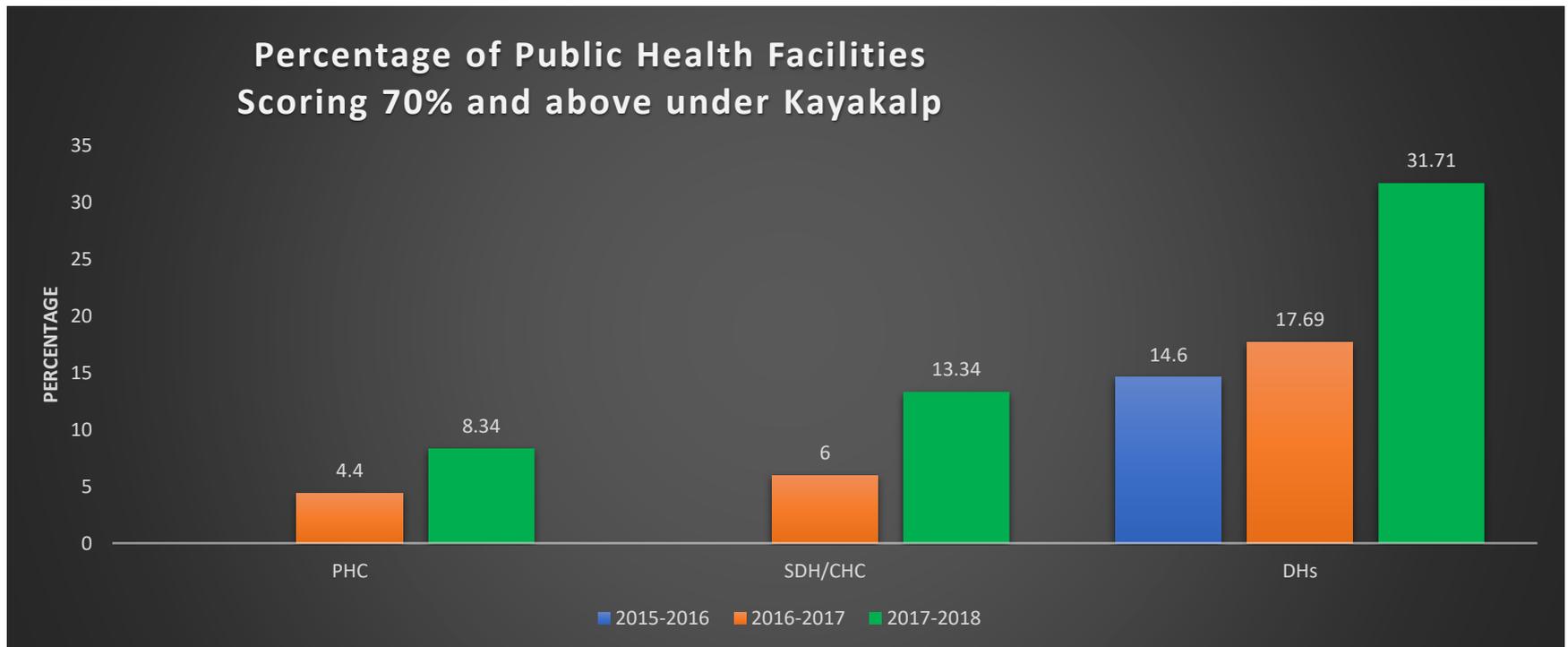
# Specific Objective 3.

## Pareto analysis was done to apply 80/20 rule
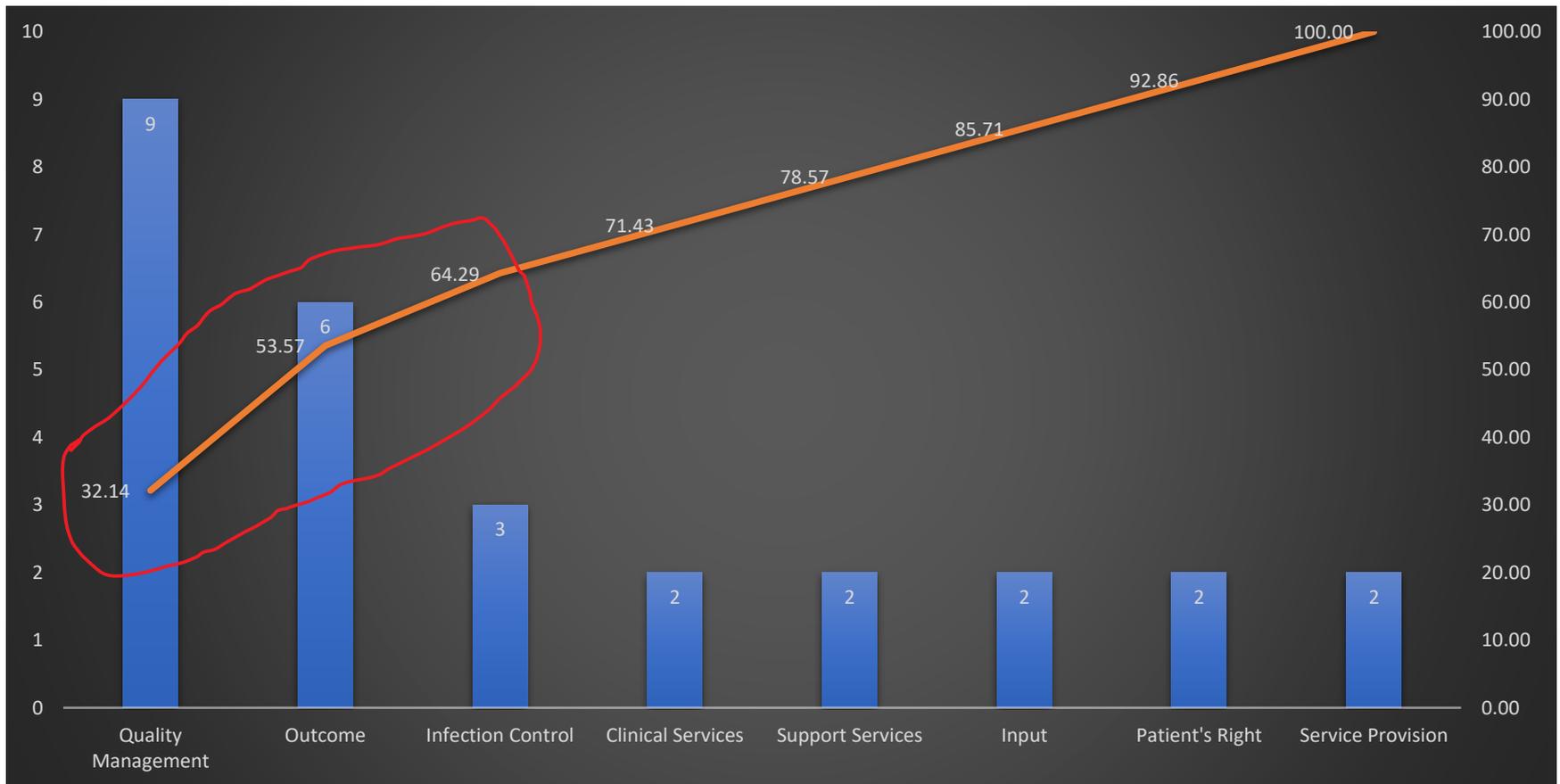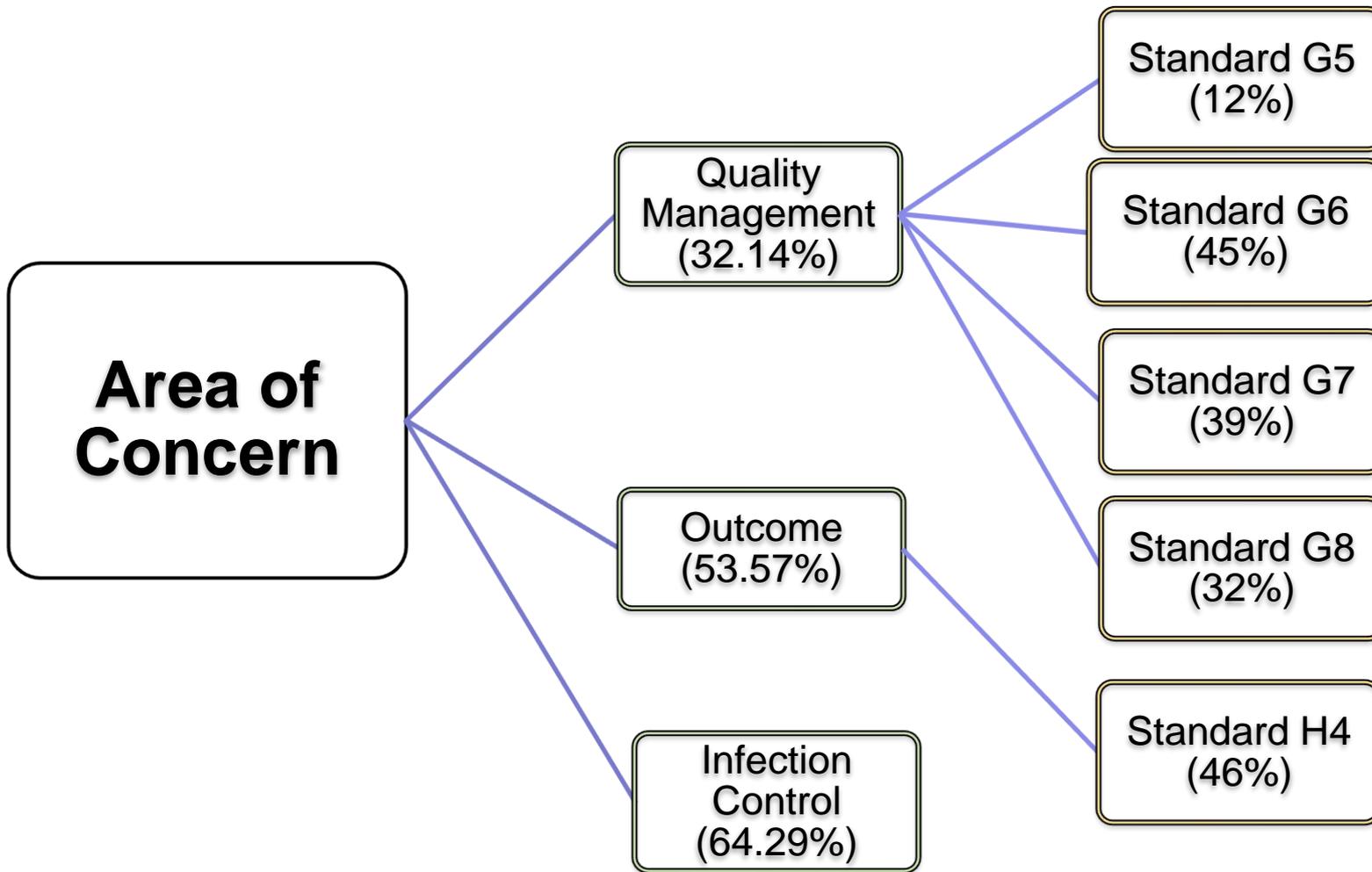
# DISCUSSION

KAYAKALP is a smaller component of NQAP- a comparative analysis



**% of per area of concern out of total hospital score -NQAS**

- Service Provision-A
- Patient Rights-B
- Inputs-C
- Support Services-D
- Clinical Services-E
- Infection Control-F
- Quality Management-G
- Outcome-H

**% of per thematic area out of total hospital score -KAYAKALP**

- Hospital/facility Upkeep
- Sanitation and Hygiene
- Waste Management
- Infection Control
- Hospital Suport Services
- Hygiene Promotion

**Graphical presentation for percentage of share by individual area of concern under NQAS & KAYAKALP respectively**

# Percentage of standard in their respective area of concern under NQAS Checklist

| Kayakalp Thematic Area | NQAS Score Card | | | |
|---|---|---|---|---|
| | Standard Name | Standard Score | % of total of respective area of concern | |
| Hospital Support Services | Standard A5 | 52 | 8.87 | |
| Hospital upkeep | Standard D4 | 414 | 19.90 | |
| Waste Management | Standard F6 | 460 | 24.15 | |
| Hygiene Promotion | Standard B1 | 308 | 29.16 | |
| | Standard D8 | 20 | 0.96 | |
| | Standard D11 | 178 | 8.55 | 5.24 |
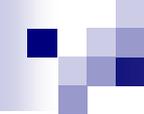
- Sustainability of process indicators once certified for Quality Certification under NQAS.

- NQAS is a long process, took almost 4-6 months per facility.

- A fair amount of paper work, printing of required documents, dispatch of letters to the empaneled assessors consumes plenty of time.

- Program is in expansion phase, need arrangements to be done, from sensitization to training of health facilities.

# CONCLUSION

- NQAS uses existing resources to generate evidence-based outcomes.

- NQAS is a process oriented program, can be improved by applying basic tools of quality.

- Kayakalp is the foundation stone for NQAS but definitely not a pillar.

- Good, better, best. Never let it rest. 'Till your good is better and better is best.

- Miles to go, needs further research in this area.

# RECOMMENDATIONS

- Use of IT enabled software in order to reduce paper work, financial expenditures and repetition of work

- Use of IT-based checklist for NQAS assessment so that direct transfer of files can be done on the same day of assessment

- Capacity building of Public Health Manager so that they can identify gaps during the internal assessment of the facility

- Formulation of Quality policies and objectives as per respective department.

- Continuous monitoring and evaluation of Key Performing Indicators on monthly basis to generate evidence-based outcomes.

- Use of Lean Principal for continuous Quality Improvement after need assessment.

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