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PARALLEL QUALITY ASSURANCE SCHEMES IN INDIA'S PUBLIC HEALTH FACILITIES: ASSESSMENT BURDEN, INCENTIVE ASYMMETRY AND THE CASE FOR A MODULAR MODEL

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Abstract : India operates several national quality assurance schemes for public health facilities at the same time. A district hospital may be assessed under the National Quality Assurance Standards (NQAS), the Kayakalp award scheme, the LaQshya labour room initiative and the MusQan child health initiative, each with its own checklist, assessor cadre, scoring rule, certification cycle and financial incentive. This paper compares the four schemes on documentary evidence drawn from Ministry of Health and Family Welfare and National Health Systems Resource Centre publications, and examines two features of the resulting arrangement. The first is overlap: of eleven quality domains identified, three are assessed by all four schemes and a further four by three of them, so that the same facility evidences the same domain repeatedly within a single year. The second is incentive asymmetry: a district hospital ranked first under Kayakalp receives Rs 50 lakh for performance on sanitation and hygiene, whereas LaQshya certification carries Rs 3 lakh per department, and the incentive attached to NQAS - the only scheme covering all eight areas of concern including clinical care - is stated in its certification guidelines merely as being in accordance with the level and scope of certification, without specified amounts. The paper argues that this configuration creates a measurable gradient of reward that is not aligned with the comprehensiveness of what each scheme measures, and proposes a modular alternative in which a common core of shared domains is assessed once and service-specific modules are added, with each scheme continuing to issue its own certificate. The proposal is presented for evaluation; the extent to which facility effort actually follows the incentive gradient is identified as the principal empirical question and remains untested.

IndexTerms - assessment burden, health policy, incentive design, Kayakalp, LaQshya, MusQan, National Quality Assurance Standards, public health facilities, quality certification.

I. INTRODUCTION

Quality of care has moved to the centre of health system policy. The Lancet Global Health Commission on High Quality Health Systems concluded that poor-quality care, rather than lack of access alone, accounts for a majority of amenable deaths in low- and middle-income countries, and argued that systems should be judged by what they deliver rather than by what they build [7]. India has responded with an architecture of standards and assessment that is, by the standards of comparable countries, unusually elaborate.

The Indian Public Health Standards specify, for every level of facility, the services to be offered and the infrastructure, staffing, drugs, equipment and diagnostics required to offer them [1]. The National Quality Assurance Standards, operational since 2015, organise assessment around eight areas of concern and apply department-wise checklists in which each checkpoint is scored two for full compliance, one for partial and zero for non-compliance [2]. Certification of a district hospital requires at least seventy per cent overall, at least seventy per cent in every department and in each area of concern, at least fifty per cent on each individual standard, and a patient satisfaction score of at least seventy per cent or three and a half on a five-point scale; certification is valid for three years subject to annual state-level surveillance [2].

NQAS, however, is not the only scheme a facility answers to. The Kayakalp award scheme, launched on 15 May 2015, assesses sanitation, hygiene, infection control, hospital upkeep, waste management and community participation, through internal, peer and external assessment, and attaches substantial cash awards to rank [3]. The LaQshya initiative assesses the quality of intrapartum and immediate post-partum care in labour rooms and maternity operation theatres, and carries its own certification and incentive [4]. MusQan, launched on 17 September 2021, does the same for child health services [5]. Each has its own checklist, its own assessor cadre, its own calendar and its own reward.

Each of these schemes is individually defensible. Sanitation in public hospitals was a genuine and visible problem that Kayakalp was designed to address; maternal and child outcomes justify dedicated attention to labour rooms and paediatric services. The question this paper asks is not whether any scheme should exist, but what happens at the facility when all of them apply at once - and whether the combined arrangement distributes assessment effort and financial reward in a way that a designer, starting afresh, would choose.

The contribution is threefold. The paper compares the four schemes on a common set of attributes from primary programme documents; it identifies and quantifies the overlap between them at the level of quality domains; and it sets out the asymmetry between what each scheme measures and what it pays, together with a modular alternative that would preserve every existing standard while assessing each domain once.

II. OBJECTIVES OF THE STUDY

1) To compare NQAS, Kayakalp, LaQshya and MusQan on scope, facility coverage, assessment method, certification threshold, cycle and reported coverage, using primary programme documents.
2) To identify the quality domains assessed by more than one scheme, and to establish how many times a facility evidences each domain in a single assessment year.
3) To compare the financial incentive attached to each scheme against the breadth of what that scheme measures.
4) To propose a consolidated modular assessment model, and to state the empirical questions on which its merit depends.

III. METHODOLOGY

This is a documentary comparative analysis. Programme documents were obtained from the Ministry of Health and Family Welfare, the National Health Systems Resource Centre and the Press Information Bureau, and were supplemented by peer-reviewed studies of facility compliance and certification in India. Data extracted for each scheme comprised the launch date, the stated scope, the facility levels covered, the assessment method, the certification or award threshold, the cycle and validity, the incentive structure and the most recent reported coverage figure with its date.

Quality domains were derived inductively. The stated scope of each scheme was read and decomposed into constituent domains, and a domain was recorded as assessed by a scheme where that scheme's published scope explicitly names it. Domains were then tabulated against schemes to produce the overlap matrix at Table II. This method reflects the schemes as described in their own documents; it does not measure the depth at which each scheme examines a domain, and two schemes recorded as assessing the same domain may examine it at very different levels of detail. That limitation is stated again in Section VIII.

No primary data were collected, no facility was visited and no human participants were involved. The analysis is confined to what the schemes' own documents state.

IV. THE FOUR SCHEMES COMPARED

Table I sets out the four schemes side by side. Three features are worth drawing out before the table is read.

First, the schemes differ greatly in maturity and reach. NQAS had certified 17,017 public health facilities as of 30 November 2024, of which 10,511 were certified in the eleven months from January 2024, indicating a steep recent acceleration [5]. MusQan, by contrast, had certified 163 facilities in the three years since its launch [5]. The newest scheme is certifying at a rate roughly two orders of magnitude below the oldest.

Second, the schemes are not wholly independent of one another. LaQshya certification presupposes full certification under NQAS, together with attainment of at least seventy-five per cent of facility-level targets and satisfaction among at least eighty per cent of beneficiaries of the labour room or maternity operation theatre [4]. A degree of nesting therefore already exists in the architecture, which matters for the feasibility of the proposal in Section VII: consolidation would not be an unprecedented step but an extension of a relationship the programme design already contains.

Third, the assessment methods differ in ways that are not obviously related to what is being assessed. Kayakalp uses a three-tier process of internal, peer and external assessment [3]. NQAS uses external assessment against department-wise checklists with a defined three-point scoring rule [2]. Peer assessment, which Kayakalp employs and which has the incidental benefit of spreading practice between facilities, is not a feature of the comprehensive scheme.

Table I. Comparative profile of four national quality assurance schemes for public health facilities in India

Scheme	Launch and stated scope	Facility levels	Assessment method	Threshold	Reported coverage
NQAS	2015; quality of care across eight areas of concern - service provision, patient rights, inputs, support services, clinical care, infection control, quality management and outcome	District hospital, sub-district hospital, CHC, PHC and sub-centre	External assessment against department-wise checklists; each checkpoint scored 2, 1 or 0	At least 70% overall, 70% in each department and area of concern, 50% on each standard, and patient satisfaction of 70% or 3.5 on a five-point scale	17,017 facilities certified as of 30 November 2024
Kayakalp	15 May 2015; sanitation, hygiene, infection control, hospital upkeep, waste management and community participation	District hospital, CHC, PHC, urban PHC and health sub-centre	Three-tier assessment: internal, then peer, then external, against a standard checklist	Ranked award; a score above 70% earns a certificate of commendation with a cash award	2,096 urban PHCs and 55 urban CHCs qualified for incentives in 2023-24
LaQshya	2017; intrapartum and immediate post-partum care, and respectful maternity care	Labour rooms and maternity operation theatres	National certification assessment, presupposing NQAS full certification	NQAS full certification, at least 75% of facility-level targets, and at least 80% of beneficiaries satisfied or highly satisfied	1,106 labour rooms and 809 maternity operation theatres certified as of November 2024

Scheme	Launch and stated scope	Facility levels	Assessment method	Threshold	Reported coverage
MusQan	17 September 2021; child-friendly services - safety, infrastructure, equipment, supplies, human resources and clinical protocols	Public health facilities providing paediatric services	National-level certification	National certification against the initiative's quality parameters	163 facilities certified as of November 2024

CHC, community health centre; NQAS, National Quality Assurance Standards; PHC, primary health centre. Coverage figures are as reported in the sources cited and are drawn from different reporting dates; they are not strictly comparable with one another.

V. THE OVERLAP BETWEEN SCHEMES

Table II tabulates eleven quality domains against the four schemes. The pattern it shows is the central empirical finding of this paper. Three domains - physical infrastructure and upkeep, infection control and biomedical waste management, and cleanliness and sanitation - fall within the stated scope of all four schemes. Four further domains fall within the scope of three. Only one domain, community participation, is unique to a single scheme.

The practical meaning of a row marked four times is not that the facility is assessed more rigorously. It is that the facility prepares evidence on that domain four times, presents it to four different assessor teams, on four different calendars, against four differently worded checklists, and receives four separate scores that cannot readily be compared with one another. The infection control register that satisfies a Kayakalp external assessor is, in substance, the same register that an NQAS assessor examines; but the two assessments are separate events, and nothing in the present design allows the second to rely on the first.

This is a burden that falls disproportionately on the facilities least able to bear it. Studies of Indian public facilities consistently report that the binding constraint is staffing rather than infrastructure: an assessment of district hospitals in Haryana against IPHS norms found a mean compliance score of 66.5 per cent [9], a state-wide assessment in Punjab found functional equipment deficient at all levels and roughly half the expected medicines available at district and sub-district hospitals [15], and an assessment of primary health centres in Maharashtra found vacancy rates of eighty-five per cent for counsellors and fifty-four per cent for staff nurses alongside buildings that were largely in place [17]. Assessment preparation is undertaken by the same short-staffed teams that deliver clinical care. Every duplicated evidence file is drawn from the same finite pool of time.

Table II. Quality domains by scheme, showing the number of schemes assessing each domain

Quality domain	NQAS	Kayakalp	LaQshya	MusQan	Schemes
Physical infrastructure and upkeep	Yes	Yes	Yes	Yes	4
Infection control and biomedical waste	Yes	Yes	Yes	Yes	4
Cleanliness and sanitation	Yes	Yes	Yes	Yes	4
Equipment and supplies	Yes	-	Yes	Yes	3
Human resources in position	Yes	-	Yes	Yes	3
Patient rights and grievance redress	Yes	-	Yes	Yes	3
Quality management systems	Yes	-	Yes	Yes	3
Patient or beneficiary satisfaction	Yes	-	Yes	-	2
Clinical protocols - intrapartum care	Yes	-	Yes	-	2
Clinical protocols - paediatric care	Yes	-	-	Yes	2
Community participation	-	Yes	-	-	1

Domains were derived from the stated scope of each scheme in its programme documents. A domain is recorded as assessed where the scheme's published scope names it explicitly. The table records whether a domain is assessed, not the depth at which it is examined; two schemes may address the same domain at very different levels of detail.

VI. INCENTIVE ASYMMETRY

If overlap is the first feature of the present arrangement, the relationship between what a scheme measures and what it pays is the second. Table III sets out the incentive structures.

The comparison at district hospital level is stark. A district hospital ranked first under Kayakalp receives fifty lakh rupees, and one ranked second receives twenty lakh; a hospital scoring above seventy per cent without ranking receives a commendation award of three lakh [3]. LaQshya certification at a district hospital carries three lakh rupees per department, awarded once over a three-year validity period, of which twenty-five per cent must be spent on branding and staff badges, twenty-five per cent on staff cash and welfare, and fifty per cent on departmental improvement [4]. For NQAS - the only one of the four schemes that assesses all eight areas of concern, including clinical care - the certification guidelines state that financial incentives are available in accordance with the level and scope of certification, and defer the amounts to operational guidelines rather than specifying them [2].

The asymmetry is therefore twofold. In magnitude, the top Kayakalp award at a district hospital is more than sixteen times the LaQshya award per department, and rewards performance on a narrower set of domains. In transparency, the scheme with the broadest scope is the one whose reward is least legible from its own principal guideline document, while the scheme with the narrowest scope publishes an award schedule by facility level and rank.

What follows from this is a proposition about design rather than an allegation about conduct, and the distinction matters. An incentive structure of this shape creates a gradient: the return to discretionary effort is highest in the domain that pays most, and sanitation and hospital upkeep are also, of all the domains in Table II, the ones in which visible improvement can be achieved fastest and demonstrated most easily to an assessor. Whether facility managers actually allocate effort along that gradient is an empirical question that the documentary evidence in this paper cannot answer. It is, however, a question worth asking, and Section VIII identifies it as the principal untested proposition here.

There is some indirect support for the more general concern. A policy analysis of a successful certification drive in Bhavnagar district, Gujarat, records that the district's strategy was oriented to meeting the seventy per cent certification threshold rather than to pursuing complete compliance, and that the adaptations used included temporary fire escapes and equipment shared between facilities [10]. A descriptive analysis of NQAS certification status in Tamil Nadu found that among facilities whose certification was deferred, quality management was the most commonly unmet area of concern, followed by outcome - the two areas least amenable to short-term visible improvement [11]. Neither study examines incentive design, but both are consistent with the proposition that assessment regimes shape where effort is directed, not merely how much of it there is.

The international literature counsels caution about assuming that certification alone produces sustained improvement. Systematic and umbrella reviews of hospital accreditation report reasonably consistent effects on process and organisational measures and inconsistent effects on patient-reported and sustained outcomes, and one review concluded that the available evidence was too scant to support any firm conclusion about effectiveness [12], [13], [14]. If the effect of a single accreditation scheme is uncertain, the effect of four simultaneous ones, differently weighted, is more uncertain still.

Table III. Financial incentives by scheme and facility level

Scheme	District hospital	CHC or sub-district hospital	PHC and other levels	Basis and conditions
Kayakalp	Rs 50 lakh (first rank); Rs 20 lakh (second rank); Rs 3 lakh (commendation)	Rs 15 lakh (first); Rs 10 lakh (second); Rs 1 lakh (commendation)	PHC: Rs 2 lakh (first); Rs 50,000 (commendation)	Annual ranked competition; commendation award for any facility scoring above 70% that does not rank
LaQshya	Rs 3 lakh per department	Rs 2 lakh per department	Medical college: Rs 6 lakh per department	One-time award over a three-year validity; utilisation fixed at 25% branding, 25% staff welfare, 50% departmental improvement
NQAS	Stated as being in accordance with the level and scope of certification	As above	As above	Amounts are not specified in the certification guidelines, which defer them to operational guidelines
MusQan	Not specified in the documents reviewed	Not specified	Not specified	National certification; incentive structure not stated in the sources examined

Amounts are as stated in the programme documents cited and may have been revised since those documents were issued. Rs 1 lakh is one hundred thousand rupees.

VII. A MODULAR MODEL FOR CONSOLIDATION

The proposal that follows changes no standard and lowers no threshold. It changes only how often a facility must evidence the same thing. Fig. 1 contrasts the present arrangement with the alternative.

The model has three components. A common core module would comprise the domains that Table II shows are assessed by three or four schemes - infrastructure and upkeep, infection control and waste, cleanliness and sanitation, equipment and supplies, human resources in position, patient rights, and quality management systems. These would be assessed once, at a single annual assessment event, by one team, producing one score that every scheme draws upon. Service-specific modules would then cover what is genuinely particular to each scheme: intrapartum and maternity care for LaQshya, paediatric services for MusQan, clinical care for NQAS, community participation for Kayakalp. Each scheme would continue to issue its own certificate or award against the combination of the common core and its own module, so no programme loses its identity, its brand or its threshold.

Three arguments support feasibility. The nesting already exists in part, since LaQshya certification presupposes NQAS full certification [4], so the principle that one scheme may rely on another's assessment is already accepted in programme design. The assessment infrastructure is shared, since state and district quality assurance committees already administer more than one scheme. And the evidence base is common, because the register, the log and the maintenance record that satisfy one assessor are in substance those that satisfy another.

A consolidated core would also make it possible to do something the present arrangement cannot: to re-weight incentives against a single scored core. At present the rewards attach to four separately scored schemes, which is why the asymmetry described in Section VI is difficult to correct without renegotiating each scheme individually. With a common core, the relative weight given to sanitation, to clinical care and to maternal and child services becomes an explicit and adjustable policy parameter rather than an artefact of the order in which the schemes were created.

The objections deserve equal statement. A single assessment event is a single point of failure: a facility that fails the common core fails everything at once, where the present arrangement allows partial success. Programme-specific focus may be diluted, and the political and administrative energy that a dedicated scheme mobilises - which the Bhavnagar case shows is a real ingredient of success [10] - may be harder to generate for a consolidated process. Assessor competence would have to span every module, which is a training and cadre question rather than a design one. And consolidation concentrates the opportunity for capture: one assessment event to influence rather than four.

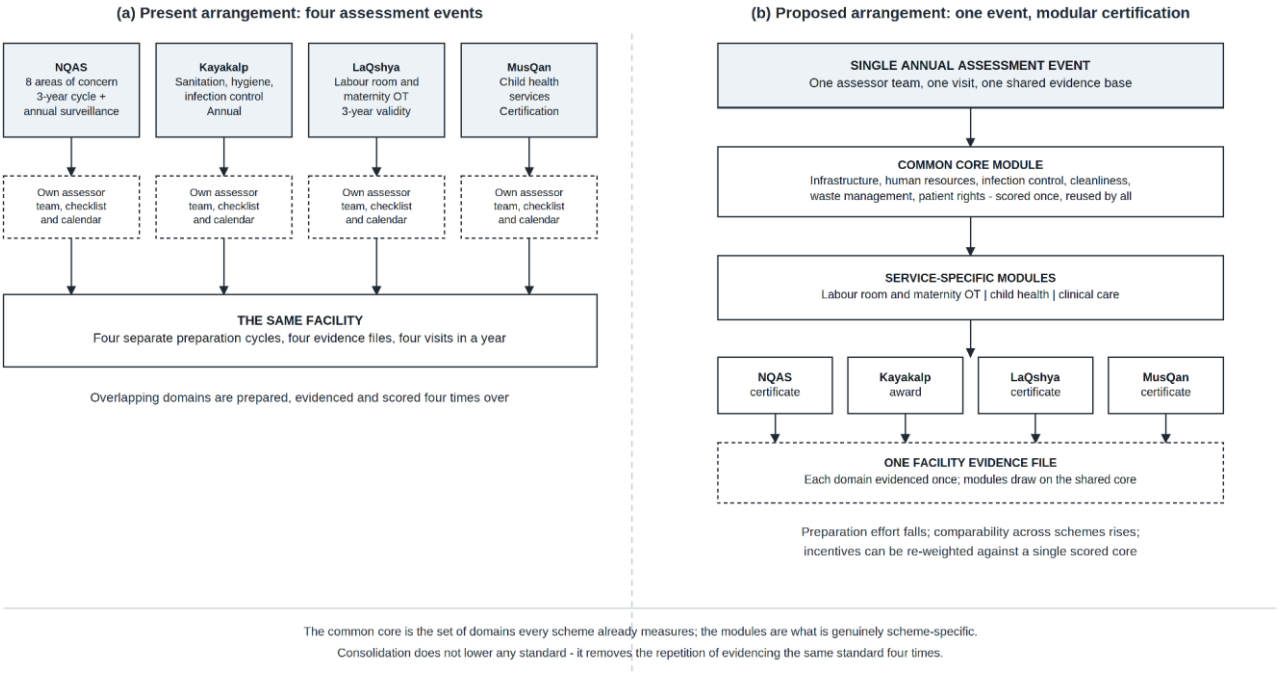


Fig. 1. Present arrangement of four parallel assessment events compared with the proposed modular model.

VIII. LIMITATIONS OF THE STUDY

1) This is a documentary analysis. No primary data on actual assessment burden were collected - the staff hours, the cost of preparation and the number of assessor visits a facility receives in a year are not measured here, and they are the figures that would establish the size of the problem rather than its existence.
2) The overlap matrix records whether a scheme names a domain in its published scope, not the depth at which it examines it. Two schemes marked as assessing the same domain may do so at very different levels of rigour, and the count in the final column of Table II should be read as an indicator of repetition rather than as a measure of equivalent effort.
3) Coverage figures are drawn from different reporting dates and different sources and are not strictly comparable. Incentive amounts are as published in the guidance documents reviewed and may since have been revised.
4) The central behavioural proposition - that facility effort follows the incentive gradient - is not tested. Establishing it would require facility-level data on where preparation effort is directed, ideally comparing domain-wise NQAS scores against Kayakalp performance in the same facilities and the same year.
5) State-level variation is not captured. Several states operate their own quality initiatives and incentive schemes in addition to the national ones, which would increase rather than reduce the overlap described here.

IX. CONCLUSION

India has built, in a decade, an assessment architecture for public health facility quality that few comparable countries can match in coverage or specificity. It has built it, however, one scheme at a time, and the schemes have not been designed against one another. The result is that of eleven quality domains, three are assessed by all four national schemes and four more by three of them, so that the facility evidences the same standard repeatedly, to different teams, on different calendars, within a single year. It is a duplication of effort at precisely the point in the system where effort is scarcest.

Alongside the duplication runs an asymmetry of reward that no designer would have chosen deliberately. The narrowest scheme publishes the largest and most legible award schedule; the broadest scheme leaves its incentive unspecified in its own certification guidelines. This paper does not claim that facilities respond to that gradient, and the documentary method used here could not establish it if they did. It claims that the gradient exists, that it is not aligned with what the schemes measure, and that the question of whether behaviour follows it is worth answering.

The modular model proposed here would leave every standard and every threshold intact while assessing each domain once, and would make the relative weighting of quality domains an explicit policy choice rather than a residue of programme history. It is offered for evaluation, not adoption. What would settle its merit is a study in a single district that measures the assessment burden facilities actually carry - the visits, the hours, the duplicated files - and compares that against the burden a consolidated model would impose. Until that study is done, the case made here is a case for asking the question, not an answer to it.

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