

**Development of a Quality Assessment and Supervision Tool for Primary Health Care Institutions in Sri Lanka**Mallawarachchi S.M.N.S.M. <sup>[1]\*</sup>, Maduragoda A.P. <sup>[2]</sup>, Dharmaratne G.S.K. <sup>[3]</sup><sup>[1]</sup>Norfolk and Norwich University Hospital, Norwich, UK<sup>[2]</sup>Salisbury Foundation Trust, Salisbury, UK<sup>[3]</sup>Ministry of Health, Colombo, Sri Lanka

**Abstract.** Primary health care institutions serve population in need of essential primary health services free of charge in Sri Lanka. Optimizing the utilization and quality of primary health care services has been a prime interest of the nation recently. The current study is aimed at assessing the current available supervision checklist of state sector primary health care institutions in Sri Lanka in the view of modifying and revising it to ensure adherence to national quality and safety standards.

**Key words:** primary health care institutions, primary health care system strengthening, health care quality, patient safety, quality assessment, supervision

**Introduction**

Primary health care (PHC) emphasises universal access to health services (World Health Organization & United Nations Children's Fund (UNICEF), 1978). Everyone, everywhere, is supposed to have the right to achieve the highest attainable level of health, which is the fundamental premise of PHC (World Health Organization, 2022). As access to healthcare contributes to the attainment of health which is a fundamental human right, PHC plays a crucial role given the fact that it is generally the initial point of contact for referral to specialty care (Hashemi et al., 2022). According to World Health Organization, PHC consists of three components, first, integrated health services to meet people's health needs throughout their lives, second, addressing the broader determinants of health through multisectoral policy and third, action and empowering individuals, families and communities to take charge of their own health (World Health Organization, 2022).

Supervision has been viewed by policy makers as a way to help link basic health units with central management through visits (Kahssay et al., 1998). It reflects a specific approach of formal face-to-face monitoring and support for health staff (Bosch-Capblanch & Garner, 2008). Supervision plays a vital role in health sector reforms (Mills, 2001) and decentralisation (Valadez et al., 1990) where management support being crucial. Although supervision of health care workers intends to improve the quality and coverage of health services, its effectiveness depends on the context, availability of other health systems inputs, implementation factors, and the means of and level at which supervision is evaluated (Rowe et al., 2018).

Sri Lanka has achieved commendable health indicators despite being a lower middle-income nation for which provision of education and health free of charge to the citizens at the point of delivery is undoubtedly the contributing factor. Yet, Sri Lanka faces the challenges of epidemiological transition, where the burden of diseases has moved from communicable diseases to the non-communicable diseases (NCDs). Strengthening PHC with robust community and family-based methodology is recognized to be the key approach to address the issues faced by the current health system. Among the strategies identified to re-orient the health services to meet future health challenges, adaptation of PHC based life course approach and task shifting of PHC workers for the battle against NCDs is prioritized

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(Senanayake et al., 2017). Re-modelling and re-orienting Primary Medical Care (PMC) units in the country to link the preventive and curative PHC services at divisional level and establishing a referral and gatekeeping system to minimize the bypassing of PHC service are other important strategies. Finally, it is aimed to introduce electronic medical records instead of the current paper based system to reduce the compartmentalization of health service and overcome the barriers with current clinical documentation practices (Mallawarachchi, 2021) to enhance the continuum of care.

The network of Primary Medical Care Institutions (PMCI) in Sri Lanka under the purview of Ministry of Health (MoH) comprised of Primary Medical Care Units (PMCU) and Divisional Hospitals (Type A, B and C). PMCUs were previously named as Central Dispensaries which are designated for basic outpatient care services including dental treatment in some. Divisional hospitals are generally the PMCUs with the capacity of inpatient care. Despite the attention paid to care quality, staffing and skill mix which are important to ensure that patient care is optimized in acute care, there has been generally less attention paid to exploring the quality of PHC services provided at PMCI level.

Directorate Healthcare Quality and Safety (DHQS), Sri Lanka was established in 2012 as the national focal point in health care quality and safety of the country. DHQS operates under the theme of being centrally driven, locally lead, clinically oriented, patient centered, continuous quality improvement, where customer/patient satisfaction, managerial system and process improvement, clinical effectiveness, risk management and safety, enabling culture for quality improvement and staff Development and welfare as key results areas of the organization (Ministry of Health - Sri Lanka, 2015).

The primary health care system strengthening project (PSSP) in Sri Lanka (2018-2023) is funded by World Bank to increase the utilization and quality of primary health care services, while emphasizing the detection and management of NCDs in high-risk population groups among the population (The World Bank, n.d.). The project is aimed at implementation of PHC system reorganization and strengthening strategies to assist the MoH and the provinces to implement the PHC system reorganization and strengthening strategies through the routine health sector planning and budget execution.

In par with PSSP, it is aimed to strengthen the PMCI capabilities and services for more comprehensive and quality care. The required PMCI capabilities in achieving the aforesaid includes the following;

- I. Having a minimum of 25% of the adult population in the PMCI's empanelment area screened and stratified for risk factors
- II. Having a minimum carder of two trained medical officers and one public health nursing officer
- III. Having a recommended set of operational diagnostic equipment and tools
- IV. Having availability of essential drugs and lab test capacity above a minimum accepted level
- V. Undergoing quarterly supportive supervision facilitated by a check list to ensure adherence to national quality and safety standards

Development of the supervision check list was basically the responsibility of the DHQS as the national focal point in health care quality and safety. A project was planned to draft a check list for the purpose.

The MoH has published a check list for supervision of primary level institutions which includes Divisional hospitals Type A, B, C and primary medical care units basically administered by Reginal Directors of Health Services (RDHS) with only few exceptions (Ministry of Health, Sri Lanka, 2015). The need of revising the available check list to suite the PSSP requirements was felt unanimously by the authorities.

### Objective

Studying the current supervision checklist of PMCIs in the view of modifying and revising it to ensure adherence to national quality and safety standards.

### Methods

Study was conducted in randomly selected four PMCIs in the Regional Directorate of Health Services Area Gampaha, namely, PMCI Bemmulla, Korasa, Pasyala and Bokalagama in July 15<sup>th</sup> to August 15<sup>th</sup>, 2020.

Key informant interviews were carried out with the staff of PMCIs where their opinion on current supervision tool and areas in need of revision was ascertained and thematic analysis of responses was conducted. The strengths and weaknesses of the current supervision check list was assessed by SWOT analysis. The issues raised by the key informants were compiled and analysed with the urgent/ important grid approach.

Administrative approval for the study was obtained from the MoH and RDHS, Gampaha.

### Results

The output of SWOT analysis of current supervision check list is depicted in Figure 1.

<b>Strengths</b>	<b>Weaknesses</b>
Friendly approach Adequately covers the key areas of health care quality and safety Well documented Not linked to any punitive actions	Lengthy and time consuming Subjectivity is not fully removed from some assessments Case specific yet important issues are not adequately covered Ambiguity in some stems of the current check list
<b>Opportunities</b>	<b>Threats</b>
Sustainable government interest in uplifting the quality of Primary health sector PSSP being funded by World Bank	Continuous irregularities in distribution of resources among health care institutions Lack of adequate staff Poor community awareness in assessment of PMCIs

**Figure 1: SWOT analysis of current supervision check list for PMCIs in Sri Lanka**

The issues in the current check list was prioritized with the use of urgent important grid method and the summary is illustrated in Figure 2.

	<b>Urgent</b>	<b>Not urgent</b>
<b>Important</b>	Subjectivity is not fully removed from some assessments Check list being lengthy and time consuming in practice Ambiguity in some stems of the current check list Case specific yet important issues are not adequately covered	Continuous irregularities in distribution of resources among health care institutions Lack of adequate staff
<b>Not important</b>		Poor community awareness in assessment of PMCIs

**Figure 2: Urgent important grid analysis of the issues recognized in current supervision check list for PMCIs in Sri Lanka**

It was unanimously agreed by the stakeholders that the current check list needed revision in order to remove the traces of subjectivity. Twelve sections were identified to be incorporated into the proposed check list (Table 1).

**Table 1: Components of the proposed check list for supervision of PMCI**

<b>Basic information of PMCI</b>	
<ul style="list-style-type: none"> <li>▪ Empaneled population of PMCI</li> <li>▪ Number of Grama Nilladhari Divisions covered</li> <li>▪ Eligible population for screening (age<math>\geq</math>35)</li> </ul>	
<b>Section</b>	<b>Components</b>
1. General	<p>A. Directions within the premises</p> <ol style="list-style-type: none"> <li>I. Availability of name boards of all three languages</li> <li>II. Directional/sign boards displayed</li> <li>III. Hospital layout displayed</li> </ol> <p>B. Drinking water</p> <ol style="list-style-type: none"> <li>I. Availability of safe drinking water               <ul style="list-style-type: none"> <li>Pipe borne</li> <li>Well</li> </ul> </li> <li>II. If the well is the source of drinking water               <ul style="list-style-type: none"> <li>Last date of chlorination</li> </ul> </li> <li>III. Whether sample has been tested for water quality Availability of storage tank</li> </ol> <p>C. Survey plan and demarcations of premises</p> <p>Availability of survey plan and land area known</p> <p>Availability of fence defining the premises of the hospital</p> <p>D. Waste management</p> <p>Availability of mechanism for disposal of infectious waste</p> <p>Availability of mechanism for waste segregation &amp; storage</p> <p>E. Human resources</p> <p>Availability of Human Resource (Permanent staff)</p> <ul style="list-style-type: none"> <li>▪ Medical Officer In-charge</li> <li>▪ Medical Officer</li> <li>▪ Registered Medical Officer</li> <li>▪ Dental Surgeon</li> <li>▪ Public Health Nursing Officer</li> <li>▪ Nursing Officer</li> <li>▪ Dispenser</li> <li>▪ Attendant</li> <li>▪ Sawukya Kaya Sahayaka</li> <li>▪ Watcher</li> <li>▪ Other</li> </ul> <p>F. Differently abled friendly arrangement</p> <p>Presence of differently abled access aids</p> <p>G. Availability of space for physical activities in the premises</p>

	<p>(Playground/ Gym/ Walking Path)</p> <p>H. Electricity- Availability of electricity with backup generation</p> <p>I. Information technology- Availability of internet facility and computer for data entry</p> <p>J. Allowances for customer feedback</p> <ul style="list-style-type: none"> <li>▪ Availability of suggestion boxes</li> <li>▪ Gaps identified through feedback and measures taken</li> </ul> <p>K. Whether the premises free of mosquito breeding places</p>
2. Out-Patients Department	Privacy in consultation
3. Emergency treatment unit	<p>Availability of essential equipment</p> <ul style="list-style-type: none"> <li>▪ ECG Recorder</li> <li>▪ Nebulizer</li> <li>▪ Sucker Machine</li> <li>▪ Multi Para monitor</li> <li>▪ Defibrillator</li> <li>▪ Laryngoscope</li> <li>▪ Oxygen Cylinders filled (at least 2)</li> <li>▪ Ambu bags</li> <li>▪ Autoscore</li> <li>▪ Ophthalmoscope</li> <li>▪ Emergency Tray</li> </ul>
4. Dressing/ Injection Room	<p>Availability of</p> <ul style="list-style-type: none"> <li>▪ Sterilizer/ Mini Auto Clave</li> <li>▪ Drum with sterile packs</li> <li>▪ Waste Segregation Method</li> </ul>
5. Clinic	<p>A. Appointment system established</p> <p>B. Availability functional Clinics (with emphasis on some special features)</p> <ul style="list-style-type: none"> <li>▪ Medical Clinics (Availability of a functioning diabetic clinic)</li> <li>▪ Antenatal clinic (VDRL facilities in house)</li> <li>▪ Family Planning Clinic</li> <li>▪ WBC/ Vaccination</li> <li>▪ Well Woman Clinic (Ability to perform pap-smear in house)</li> </ul>
6. Healthy life centers	<p>A. Availability of participant register</p> <p>B. Availability of quarterly return updated</p> <p>C. Availability of NCD management manuals at the premises</p> <p>D. Performance by quarters with following data</p> <ul style="list-style-type: none"> <li>▪ Number and percentage of population screened</li> <li>▪ Percentage of smoking among males</li> <li>▪ Percentage of betel chewing</li> <li>▪ Percentage of alcohol consumption</li> <li>▪ Over-weight</li> <li>▪ Obesity</li> <li>▪ Elevated Blood Pressure</li> <li>▪ Elevated Blood sugar</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Percentage of population assessed for cardiovascular diseases risk</li> <li>▪ Male/Female Participation Ratio</li> <li>▪ Lifestyle modification facilities/methods/practices</li> </ul>
7. Pharmacy	<ul style="list-style-type: none"> <li>A. Availability of 16 essential drugs</li> <li>B. Availability of refrigerator</li> <li>C. Availability of air conditioning at main drug storage and dispensing area</li> </ul>
8. Patients transfer facilities for emergencies	Whether transport method facilitated by PMCI
9. Laboratory	<ul style="list-style-type: none"> <li>A. Type/s of laboratory facilities available <ul style="list-style-type: none"> <li>▪ Mobile Lab</li> <li>▪ Satellite Lab</li> <li>▪ Strips method for point of care testing</li> </ul> </li> <li>B. Average number of tests conducted per quarter</li> </ul>
10. Storage	Presence of condemned items in the premises
11. Friends of facility committee established	<ul style="list-style-type: none"> <li>A. Availability of committee</li> <li>B. Number of meetings held per quarter</li> <li>C. Whether minutes available and shared</li> <li>D. Activities/ projects conducted to improve quality</li> <li>E. Availability of donations register</li> </ul>
12. Dental treatment unit	Availability

### Discussion

Link created by supervision between peripheral health units and the administrative centre is important in the view of monitoring being required for good governance (Segall, 2003).

Checklists are regarded as a feature of supervision which provide supervisors with a structure for their visits (Bosch-Capblanch & Garner, 2008). Yet the structured approaches could give more authoritarian and controlling nature to supervision, rather than listening, problem-solving and feedback. Still, monitoring of performance is necessary to take remedial action and give appropriate feedback. The approaches to supervision should be designed to enable best outcomes in terms of quality of care and health service delivery.

During planning of supervision tool at the current study it was considered as of foremost importance, that supportive relationship between supervisor and supervisee enabling joint problem-solving. The burden that supervision could pose on both supervisors and supervisees time and other resources could be minimized through an integrated approach.

The study highlighted that need of minimizing the room for ambiguity in supervision check list which is achievable through simplification and standardization. Necessary provisions must be taken to ensure the data gathered through check list to be double checked with independent evidence such as absence of mosquito breeding places to be confirmed by Public Health Inspector's report. The case specific issues can be handled on a fair basis by allowing adequate spaces for additional inputs from both supervisor and supervisee. The check list needs to be tested in the field and amendments may be needed depending on the feedback.

**References**

- Bosch-Capblanch, X., & Garner, P. (2008). Primary health care supervision in developing countries: Supervision of health services in developing countries. *Tropical Medicine & International Health*, 13(3), 369–383. <https://doi.org/10.1111/j.1365-3156.2008.02012.x>
- Hashemi, G., Wickenden, M., Bright, T., & Kuper, H. (2022). Barriers to accessing primary healthcare services for people with disabilities in low and middle-income countries, a Meta-synthesis of qualitative studies. *Disability and Rehabilitation*, 44(8), 1207–1220. <https://doi.org/10.1080/09638288.2020.1817984>
- Kahssay, H. M., Taylor, M. E., & Bermana, P. A. (1998). *Community health workers: The way forward*. World Health Organization.
- Mallawarachchi, S. M. N. S. M. (2021). Clinical Documentation Practice: A Study of Doctors' Medical Documentary Compliance in Government Hospitals in Gampaha District, Sri Lanka. *Hospital Topics*, 1–7. <https://doi.org/10.1080/00185868.2021.1926385>
- Mills, A. (2001). *Challenge of Health Sector Reform*. Palgrave Macmillan, a division of Macmillan Publishers Limited. <https://link.springer.com/book/10.1007/978-1-349-40859-7>
- Ministry of Health - Sri Lanka. (2015). *National Policy on Healthcare Quality and Safety*. [http://www.health.gov.lk/moh\\_final/english/public/elfinder/files/publications/publishpolicy/16\\_Quality%20and%20Safety.pdf](http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/publishpolicy/16_Quality%20and%20Safety.pdf)
- Ministry of Health, Sri Lanka. (2015). *General circular No.02-166/2015-Supervision of Primary Health Care Curative Institutions (Divisional Hospitals and Primary Medical care Units)*.
- Rowe, A. K., Rowe, S. Y., Peters, D. H., Holloway, K. A., Chalker, J., & Ross-Degnan, D. (2018). Effectiveness of strategies to improve health-care provider practices in low-income and middle-income countries: A systematic review. *The Lancet Global Health*, 6(11), e1163–e1175. [https://doi.org/10.1016/S2214-109X\(18\)30398-X](https://doi.org/10.1016/S2214-109X(18)30398-X)
- Segall, M. (2003). District health systems in a neoliberal world: A review of five key policy areas. *The International Journal of Health Planning and Management*, 18(S1), S5–S26. <https://doi.org/10.1002/hpm.719>
- Senanayake, S., Senanayake, B., Ranasinghe, T., & Hewageegana, N. S. R. (2017). How to strengthen primary health care services in Sri Lanka to meet the future challenges. *Journal of the College of Community Physicians of Sri Lanka*, 23(1), 43. <https://doi.org/10.4038/jccpsl.v23i1.8092>
- The World Bank. (n.d.). *Sri Lanka: Primary Health Care System Strengthening Project*. <https://projects.worldbank.org/en/projects-operations/project-detail/P163721>
- Valadez, J., Vargas, W., & Diprete, L. (1990). Supervision of primary health care in Costa Rica: Time well spent? *Health Policy and Planning*, 5(2), 118–125. <https://doi.org/10.1093/heapol/5.2.118>
- World Health Organization. (2022). Primary health care. *Health Topics*.
- World Health Organization & United Nations Children's Fund (UNICEF). (1978). *Primary health care: Report of the International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978*.