

# Implementation of a National Health Scheme at a Tertiary Healthcare Facility in Delhi: A Quality Improvement Initiative

SWATI AGRAWAL, KANIKA CHOPRA, SWATI DHAR, SHALINI SINGH AND MANJU PURI

*From the Department of Obstetrics and Gynecology, Lady Hardinge Medical College, New Delhi 110001.*

*Correspondence to Dr. Kanika Chopra, Assistant Professor, Department of Obstetrics and Gynecology, Lady Hardinge Medical College, New Delhi 110001.*

*kank2kanu@yahoo.co.in, ORCID iD: 0000-0002-1977-2364*

*Received on April 01, 2023; Accepted on August 4, 2023*

## ABSTRACT

**Background:** India is one of the front runners in providing equitable health care through its various health schemes and programs. One such programme is Janani Shishu Suraksha Karyakram (JSSK) designed to ensure zero out-of-pocket expenditure for pregnant and postnatal women admitted to public health facilities in India. Unfortunately, effective implementation is lagging and leaves a lot to be desired. As per a baseline survey conducted in our tertiary hospital, it was found that out-of-pocket expenditure was being incurred by 100% of our obstetric patients. This was a trigger to plan quality improvement (QI) project to ensure successful implementation of JSSK programme and decrease the out-of-pocket expenditure for obstetric patients from the current 100% to <10% within a period of 6 weeks.

**Patients and Methods:** A QI team was formed comprising of faculty members, residents and nursing officers committed to implement the programme. A fish-bone analysis was done to analyze the problem. It was found that lack of policy, lack of sensitization among health care professionals, lengthy process of indent of drugs, and insufficient storage space were the main reasons for failure of the scheme. Thereafter, an elaborate intervention was done with background preparation. It included opening a dedicated bank account as per existing government schemes and facilitating the signing of memorandum of understanding (MoU) between administration and in-house pharmacy. Thereafter, meetings were held between all administrative heads and nursing officers-in-charge to sensitize them about the initiative.

**Results:** The out-of-pocket expenditure for JSSK beneficiaries decreased from a baseline of 100% to 1.78% over a period of 6 weeks starting from July 1, 2021 till August 11, 2021, with maintained low rates thereafter.

**Conclusion:** It is important that all government schemes should reach the target population to bring the desired impact. QI methodology is an effective method of step wise, systematic and successful implementation of such programs.

**Keywords:** Janani Shishu Suraksha Karyakram, Out-of-pocket expenditure, Quality improvement.

## INTRODUCTION

The goal of Reproductive and Child Health (RCH) Program under the National Rural Health Mission (NRHM) of the Government of India (GoI) is to reduce the maternal and infant mortality. To this end, the Ministry of Health and Family Welfare, Government of India, launched a program known as Janani Suraksha Yojna (JSY) in 2005. This scheme comprised of monetary incentives to all pregnant women delivering at public sector hospitals with an aim to increase the number of institutional births. This resulted in more than one crore women benefitting every year. However, it was found that 27% deliveries were still taking at home.<sup>1</sup> The main cited reason was a high out-of-pocket expenditure at public facilities which was deterring families

as 6.7% of our population still lives below poverty line.<sup>2</sup> Field visits after JSY launch found a paucity of essential drugs and consumables in most public health facilities which translated into a high out-of-pocket expenditure. Thereafter, Janani Shishu Suraksha Karyakram (JSSK) was launched under NRHM. It was initially launched in Mewat District of Haryana on June 1, 2011.<sup>1</sup> The beneficiaries of JSSK included all pregnant women delivering at any public health facility (across all states and union territories) and all sick newborns till 30 days after birth. The age cut-off for offsprings who could benefit from this scheme was subsequently increased to one year of age in 2013.<sup>3</sup> The focus was to decrease maternal and neonatal morbidity and mortality by increasing accessibility to health facilities without the fear of spending money. It was hoped to

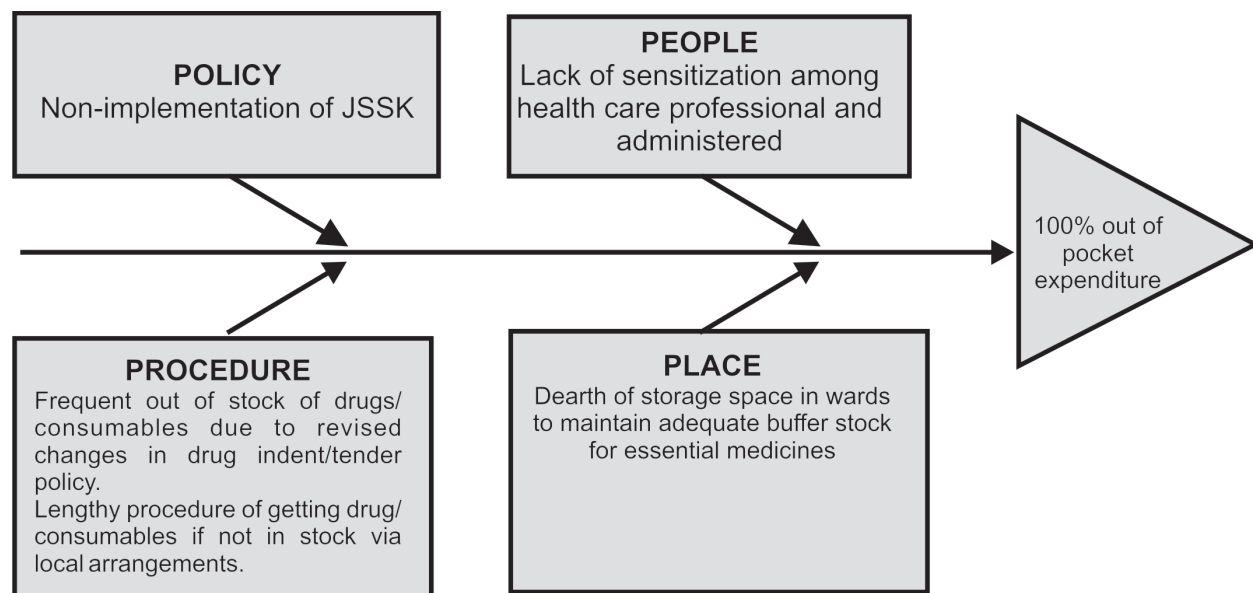
decrease maternal death by 67,000 and neonatal deaths by 900,000 every year. It involved transfer of a buffer fund by the government to public facilities for emergency procurement of stock-out drugs and consumables.

Even after a decade of the launch of JSSK, the scheme has not been uniformly implemented across the country. The reasons are multifactorial including technical and administrative hurdles. A baseline survey conducted in our government run tertiary care facility found that out-of-pocket expenditure was being incurred by 100% of the obstetric patients. This was a trigger to plan a Quality Improvement (QI) project to decrease the out-of-pocket expenditure to <10% within a period of 6 weeks through effective implementation of JSSK scheme.

### PATIENTS AND METHODS

A QI action team was constituted consisting of faculty members, resident doctors and nursing officers. A fish-bone analysis was done by the QI team (**Fig. 1**). The main causes for failure of the program in the institution were identified. These included a lack of a defined institutional policy regarding the implementation of JSSK scheme, lack of sensitization among health care professionals regarding the scheme, frequent stock-out of drugs and consumables due to changes in drug indent policy of GoI, time consuming and tedious procedures for the local purchase of out-of-stock drugs and consumables and limited space in ward stores to keep a buffer stock of drugs and consumables.

Substantial groundwork was done prior to roll out of JSSK program at the institution. A nodal officer was identified. A separate dedicated bank account was opened with the institutional head, head of department of obstetrics and gynecology and nodal officer of the JSSK program as co-signatories to handle all finances related to JSSK scheme. A baseline survey was conducted regarding the type and quantity of drugs and consumables purchased by obstetric patients during their hospital stay. An estimate of average out-of-pocket expenditure incurred by the patients per month was calculated and extrapolated to 6 months requirement. The fund requirement was communicated to the government and received in the dedicated bank account. Memorandum of understanding was signed between the institutional head and the owner of the pharmacy counter located within the hospital premises to ensure timely and free provision of necessary drugs and consumables to pregnant and parturient women on the basis of a requisite “*special authority slips*” which were printed and issued to eligible obstetric patients for raising specific requests for each patient by name. The consultants authorized for signing these authority slips was finalized and conveyed to the pharmacy. A list of essential drugs and consumables required for obstetric wards, labour rooms and operation theatres was circulated among the stock in-charges of all areas, to ensure availability of a buffer stock at all times. Separate almirahs were indented to maintain the buffer stock in all the concerned areas.



**Fig. 1** Fishbone-analysis.

Following the groundwork, a sensitization meeting was conducted by the head of the department of obstetrics and gynecology with different stakeholders including faculty members of neonatology and anesthesia, nursing in-charges of all obstetric wards, obstetrics operation theatres and labour rooms.

After the roll out, data collection and analysis were

done at weekly intervals by the team members. The outcome indicator was identified as the percentage of patients incurring any out-of-pocket expenditure out of all the pregnant and parturient discharged from our institution. The nursing officers were asked to record the same in their discharge registers. A dedicated Whatsapp group was created for the obstetric ward functionaries to facilitate communication, rapid identification of problems

**Table I Plan-Do-Study-Act (PDSA) Cycles for Implementation of JSSK Program**

<i>PDSA Cycle</i>	<i>Goals of meeting and actions taken</i>	<i>Out-of-pocket expenditure</i>	<i>Reasons for out-of-pocket expenditure</i>
Week 1(July 1, 2021 to July 7, 2021)	Meeting involved all unit heads and nursing officers-in-charge of all wards for sensitization to JSSK program. All were asked to do a baseline analysis of the common stock-out items and record the patients doing out-of-pocket expenditure in the discharge register. The minutes of meeting were widely disseminated among doctors and nurses of various obstetric wards, operation theatres and labour rooms.	100%	The indigenous diapers which were routinely made by the support staff were not being made. Patients were asked to procure diapers/sanitary pads at the time of delivery.
Week 2 (July 8, 2021 to July 14, 2021)	Nurses overseeing the labour room were asked to prepare indigenous diapers from gauze/cotton. Procurement of sanitary pads from the store was also mobilized.	88%	Staff nurses of one of the post-natal wards were still asking patients to bring baby diapers as they were not sensitized about the JSSK.
Week 3 (July 15, 2021 to July 21, 2021)	Administrative in-charges of post-natal wards along with nursing officers-in-charge were again sensitized using a Whatsapp groups.	10.3%	Doctors were prescribing antibiotics without confirming the availability in stock. Patients were being asked to procure certain items like betadine ointment, spirit and lactocalamine lotion from outside.
Week 4 (July 22, 2021 to July 28, 2021)	Doctors were requested to prescribe drugs only after confirming their availability in stores. In case of non-availability, they were asked to prescribe alternative drugs which were available. Spirit was available in half liter bottles and nursing in-charges of postnatal wards were asked to distribute the same to the post-cesarean patients in smaller bottles along with some cotton.	7.84%	Newly joined residents prescribed medicines from outside as they were unaware about the JSSK implementation.
Week 5 (July 29, 2021 to August 4, 2021)	All newly joined residents were sensitized and trained about JSSK scheme and its implementation using Whatsapp messages.	2.17%	Procurement of medicines for the neonates admitted in neonatal intensive care unit from outside.
Week 6 (August 5, 2021 to August 11, 2021)	Pediatric consultant-in-charges and residents were informed about the authority slips and procedures to ensure implementation of JSSK scheme.	1.78%	-

encountered and their prompt rectification. The improvement process was implemented using multiple Plan, Do, Study, Act (PDSA) cycles, with 6 such weekly cycles being undertaken.

## RESULTS

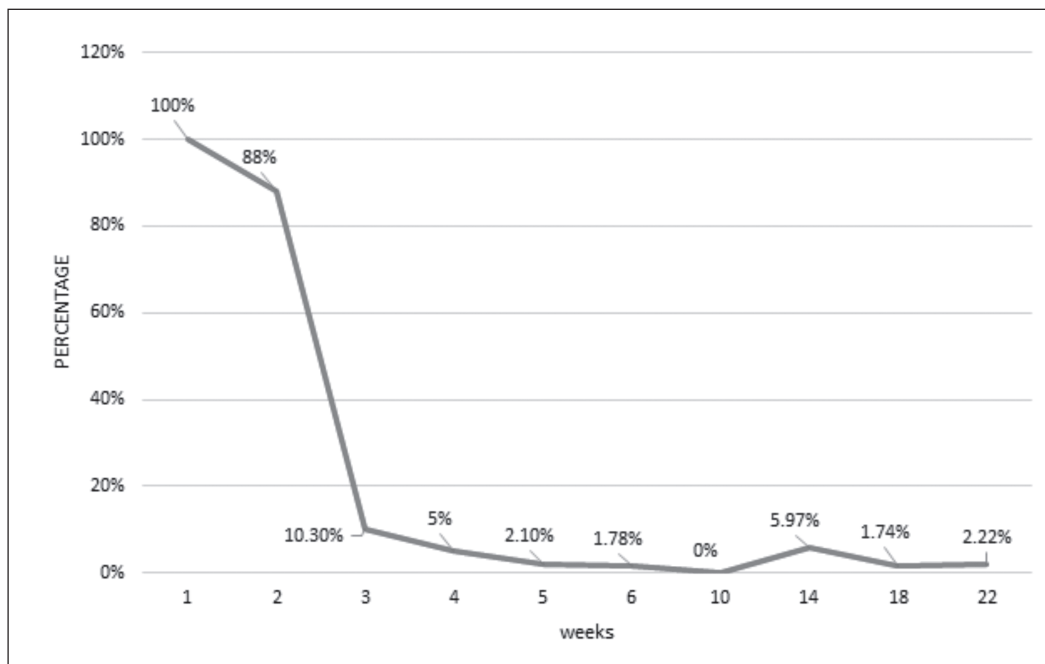
The JSSK program was thus rolled out in our institution with effect from July 01, 2021. The period of QI initiative was over six weeks starting from July 01, 2021 upto August 11, 2021. It was found that the out-of-pocket expenditure gradually decreased from 100% to 1.78% over these six weeks and it involved weekly meeting with stakeholders and regular analysis of reasons for out-of-pocket expenditures for patients as depicted in **Table I**. A time series chart was plotted for the collected data as shown in **Fig. 2**.

## DISCUSSION

Quality improvement (QI) is a relatively new concept, which has a tremendous potential to improve the processes involved in provision of healthcare and implementation of national programs across nations. In 2015, World Health Organization (WHO) Regional Office for South-East Asia (SEARO) launched the regional framework for Quality of Care (QOC) methodology i.e., point of care quality improvement (POCQI).<sup>4</sup> This methodology has proved useful in building capacity at

health facilities by finding easy and effective solutions for various problems and sustaining improvement by simple interventions. Our aim was to decrease out of pocket expenditure of our patients by following POCQI methodology.

Various QI initiatives have been employed in several middle and low socio-economic countries to bring the desired changes in health infrastructure to curtail maternal and neonatal mortality. In Ghana, QI was done under the name of “Project Fives Alive” to improve maternal and child health outcomes.<sup>5</sup> QI approach was used in Tanzania and Uganda to improve population level coverage and quality of essential maternal and new-born services.<sup>6</sup> CARE India implemented a comprehensive QI program in association with Government of Bihar (2014-2017) to improve reproductive, maternal, newborn and child health and nutrition services in public facilities. This helped strengthen infrastructure, implement government policies and ensure effective follow-ups. It was found that percentage of institutional deliveries increased across all primary health centres and district hospitals, along with improvement in provision of emergency obstetrics and newborn services.<sup>7</sup> Our QI endeavour helped provide free health care to nearly all pregnant and parturient women delivering at our institution. Timely identification of any shortfalls and corrective strategies used by us ensured successful and time bound implementation of the program.



**Fig. 2** Run chart of decrease in the out-of-pocket expenditure over the study period.

The success of this initiative should inspire other public hospitals to follow suit to attain success of JSSK program.

We conclude that QI approach is useful in implementing government programs successfully and in an organized manner at facility level. The ideas implemented in our study did not require any additional resources and can be replicated in other institutions for the successful implementation of health policies.

CONTRIBUTORS: SA and KC were the nodal officer and the link officer of JSSK scheme implementation respectively. MP was the head of the department and also the overall in-charge of implementation of the policy. All authors played pivotal roles in the implementation of the scheme as well as planning of the QI project. SD and SS were actively involved in collection of data regarding the project and drafted the initial manuscript. All authors critically analyzed the manuscript and approved the final version.

COMPETING INTERESTS: None; FUNDING: Nil.

## REFERENCES

1. National Rural Health Mission. Guidelines for Janani Shishu Suraksha Karyakram (JSSK). New Delhi: Maternal Health Division, Ministry of Health and Family Welfare, Government of India, Nirman Bhavan; 2011. Accessed August 04, 2023. <https://nhm.gov.in/images/pdf/programmes/guidelines-for-jssk.pdf>
2. Meena VK. Study of impact of poverty in India. *IOSR Journal of Humanities and Social Science*. 2022;27:63-67. doi: 10.9790/0837-2711016367
3. Ministry of Health and Family Welfare. Gender Issues. Accessed August 04, 2023. <https://main.mohfw.gov.in/sites/default/files/23Chapter.pdf>
4. World Health Organization. Regional Office for South-East Asia. Towards maternal and newborn survival in the WHO South-East Asia Region: Implementation experience of the WHO SEARO model of point-of-care quality improvement (POCQI). World Health Organization. Regional Office for South-East Asia. 2023. Accessed August 04, 2023. <https://apps.who.int/iris/handle/10665/337921>
5. Singh K, Brodish P, Speizer I, *et al*. Can a quality improvement project impact maternal and child health outcomes at scale in northern Ghana? *Health Res Policy Syst*. 2016;14:45. doi: 10.1186/s12961-016-0115-2
6. Waiswa P, Manzi F, Mbaruku G, *et al*; EQUIP study team. Effects of the EQUIP quasi-experimental study testing a collaborative quality improvement approach for maternal and newborn health care in Tanzania and Uganda. *Implement Sci*. 2017;12:89. doi: 10.1186/s13012-017-0604-x
7. Creanga AA, Srikantiah S, Mahapatra T, *et al*. State wide implementation of a quality improvement initiative for reproductive, maternal, newborn and child health and nutrition in Bihar, India. *J Glob Health*. 2020;10:021008. doi: 10.7189/jogh.10.021008