The Government of Karnataka, to ensure reduction of home deliveries and to promote institutional deliveries, promoted various Programmes to make MCH services available and accessible with equitable distribution of health facilities and health services. Among the various demand generation schemes that are implemented by the Department of Health and Family Welfare, Government of Karnataka, “Madilu” programme is a very unique programme, which has the potential to drastically improve institutional deliveries, particularly amongst the BPL, SC and ST pregnant women. On 15th September 2007, the Government of Karnataka launched the “Madilu” programme throughout the State, the main objectives of the said programme was to promote institutional deliveries amongst, BPL, SC and ST pregnant women and thereby reduction of MMR and IMR in the State. “Madilu Kits” are issued to BPL, SC and ST pregnant women who deliver in government hospitals for first two live births (relaxed to all live births in some districts) after 48 hours stay for normal deliveries and after 5 days of stay in cases of Caesarean Section deliveries. It is supplied in all the Government hospitals, starting from PHCs to Medical College Hospitals along with other cash incentives like Janani Suraksha Yojane (JSY) and Prasothi Aaraikhe scheme (PSA), since 2007-08. The pre-condition of issuing Madilu Kits to BPL, SC and ST pregnant women for first only two live births has been relaxed since the middle of 2014-15 in High Priority Districts of Bidar, Kalaburgi, Yadgir, Koppal, Raichur, Bellary, Gadag, Vijayapura, Bagalkote and Chamarajanagar, and they are being issued to BPL, SC and ST pregnant women for all deliveries.

A detailed evaluation of the Madilu Scheme was needed to assess the efficiency in implementation of the program in terms of its reach especially to the hard to reach tribal areas, its impact in terms of improvement in Institutional deliveries in government hospitals, the
rightness in process of the program in terms of issue of kits as per program guidelines, awareness about the program in the state, timeliness of issue of the kit and feedback regarding the usefulness and quality of the items supplied in the kit.

An evaluation was conducted in all the 30 districts of Karnataka by selecting two taluks and three primary health centres randomly within each district. Hospital data was collected from hospital records and interview with the hospital staff regarding the status of institutional deliveries in the areas catered. The list of Madilu beneficiaries was obtained, sorted into three categories viz: BPL SC, BPL ST AND BPL others and 10 beneficiaries from each list were interviewed using a pre-designed, semi-structured questionnaire. Beneficiaries were segregated year-wise viz: 2011-12, 2012-13, 2013-14, and 2014-15, and a total of 120 beneficiaries were interviewed (30 beneficiaries/year) per district. Focus group discussions were conducted as per predetermined protocols in each of the selected areas category wise and where the number of beneficiaries was less, in mixed groups. Primary and secondary data obtained from all the 30 districts by above mentioned data collection strategies were analysed and results were categorized as per requirements expected from the objectives of the evaluation.

A total of 3502 beneficiaries were interviewed personally for their opinion about the Madilu scheme and the kit provided. Out of the 3502 respondents, 1096 (31.3%) belonged to BPL SC and 1656 (47.29%) belonged to BPL others categories, whereas the BPL ST Category respondents were only a minimum of 750 (21.5%). Most of the respondents belonged to class IV (43.3%) and Class V (37.9%) in the socio-economic scale and literates (91%). Majority of the institutional deliveries conducted were normal vaginal deliveries (n=3393, 98.4%).

There was a good reach of the programme in terms of improvement in institutional deliveries in districts like Bangalore rural, Gulbarga, Chitradurga, Haveri and Yadgiri. There was a decline in institutional deliveries in Ramanagar, Shimoga and Udupi during the period of Madilu scheme
implementation. The kit was received by all the categories in the analysed districts. But in some districts like Bagalkot, Bangalore rural, Bidar, Gadag, Udupi and Uttarakannada there was a sparsity of supply of Madilu kits and the supply was found to be too less when compared with the institutional deliveries conducted during the scheme period. Beneficiaries were generally satisfied with the receipt of the Madilu kits. There was a good appreciation and welcome for the Madilu program in districts like Belgaum, Chamrajnagar, Chikkaballapur, Chikamagalur, Gadag, Gulbarga, Haveri and Yadgiri.

There was a delay in issue of the kits as well as the JSY/PSA money encountered in Chitradurga (99%), Davangere (99%), Gadag (99%), Gulbarga (100%), Kodagu (100%), Kolar (100%), Koppal (100%), Raichur (99%), Ramanagara (93%), Shimoga (100%) and Yadgiri (97.6%). There were some technical problems in obtaining the Madilu kits viz. the beneficiaries referred for complicated deliveries from the government PHCs to the nearby private hospitals due to longer distance to the next referral unit were considered not eligible to receive the kits. In tribal areas in Kodagu district, those employees working in coffee plantations far from home were denied Madilu kits when they returned home after delivery from a different PHC other than the one near their residence. In a few districts problems were encountered in providing a single Madilu kit to twin pregnancies. In 13 districts, there was payment of money by the beneficiaries to obtain the kit. Out of these 5 districts which contributed major share in the money involvement, had very poor supply of kits due to ‘out-of stock.’ A total of 67 (1.93%) respondents accepted payment of money (Rs.80/-on average) to procure the kit.

The size of few items in the kit like the baby dress (n=322, 8.95%), sweater (n=130, 3.62%), and washing soaps (n=93, 2.59%) were smaller than expected as expressed in 18 districts. The quality of a few items like the Sanitary pads (square cotton cloth with noose) (n=65, 1.8%), Washing soap (n=52, 1.45%), Sweater + cap + socks (n=179, 5%), Plastic bag (kit) (n=252, 7%) rubber sheet, the tooth paste and the linen provided was not of expected standards which people...
anticipated. The brand of items placed in the kit like the tooth paste, soaps, coconut oil and detergents needed a change to the normal brands which people use in day to day life and locally available in 8 districts which were mostly peri-urban areas like Bangalore, Kolar, Bagalkot, Koppal and Mandya. The number of items in the kit especially the baby soap and diapers demanded an increase in number in a few districts like Bangalore rural and Bidar. The people also expected a few items to be added to the kit like slippers (11 districts) for the mother, full body covering sweaters for the baby (4 districts), Dettol antiseptic lotion (3 districts), mosquito nets to be provided irrespective of malaria or dengue endemicty and baby oil. The products considered as most useful by the beneficiaries were the mosquito curtain (72.75 %), carpet (54.73 %), bed sheet (54.7%) and mother’s soap (53.58%). The products considered useless by the beneficiaries were mosquito curtain (6.19%), plastic kit bag (4%), Sweater + cap + socks (3.8%), baby dress (3.5%) and comb &coconut oil (3%). The program has penetrated isolated tribal villages like Beduguli in Chamrajnagara district and Balele, Virajpet Taluk in Kodagu district where the kits were provided on time with a good satisfaction from the beneficiaries. Majority of the respondents (73.4%) rated the Madilu program as “useful” (grade 4 on a 5 point Likert scale).

A negative scoring system devised based upon the deviations of the districts from the guidelines of the Madilu program, timeliness, completeness in issue and perceived satisfaction of the beneficiaries about the Madilu kit ranked Mandya as a district with excellent performance (Rank: 1, negative score=16), followed by Chamrajnagara (2, 26), Mysore (3, 52), Uttarkannada (4, 66) and Koppal (5, 70). The least performing district was Raichur (Rank: 30, negative score=429) preceded by Kolar (29, 420), Ramanagar (28, 380) and Bijapur (27, 360).

The major recommendations based on various observations and interviews with the beneficiaries would be to circulate awareness to the PHCs on the necessity to deliver Madilu kits to the deserved beneficiaries, especially in tribal areas, based on local judgement of the
medical officer/panchayat officers without denial based on non-possession of documents like adhar/BPL card. Segregation and separate pouch for the baby needs and mother needs has to be made as a problem arises in issuing kits to twin deliveries. The cosmetic items for mothers in the kit like soaps, comb, detergents which are speculated most about the quality can be replaced with need-based items like slippers and sanitizers or Dettol antiseptic solution. The sanitary pads for the mother and the diapers for the child supplied in the form of clothes can be replaced by soakable diapers which will keep the skin dry. The size of the sweaters, caps and socks provided for the baby should be increased or made expandable with elasticity or size-adjustable models. The mosquito nets should be provided to all beneficiaries irrespective of malaria/dengue endemicity and should be included within the kit. The size and quality of the linen provided in the kit needs improvement viz. more thick and big sized. The rubber sheet in the kit needs improvement in quality and size. The Madilu kits should include educative materials regarding usage of diapers, handwashing techniques, Kangaroo mother care and breastfeeding practices.