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Cost of implementing the QualityRights programme in public hospitals in Gujarat providing mental healthcare

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***Background & objectives*: Investment in mental health is quite meagre worldwide, including in India. The costs of new interventions must be clarified to ensure the appropriate utilization of available resources. The government of Gujarat implemented QualityRights intervention at six public mental health hospitals. This study was aimed to project the costs of scaling up of the Gujarat QualityRights intervention to understand the additional resources needed for a broader implementation.**

***Methods*: Economic costs of the QualityRights intervention were calculated using an ingredients-based approach from the health systems' perspective. Major activities within the QualityRights intervention included assessment visits, meetings, training of trainers, provision of peer support and onsite training.**

***Results*: Total costs of implementing the QualityRights intervention varied from Indian Rupees (₹) 0.59 million to ₹ 2.59 million [1United States Dollars (US $) = ₹ 74.132] across six intervention sites at 2020 prices with 69-79 per cent of the cost being time cost. Scaling up the intervention to the entire State of Gujarat would require about two per cent increase in financial investment, or about 7.5 per cent increase**

in total cost including time costs over and above the costs of usual care for people with mental health conditions in public health facilities across the State.

***Interpretation & conclusions*: The findings of this study suggest that human resources were the major cost contributor of the programme. Given the shortage of trained human resources in the mental health sector, appropriate planning during the scale-up phase of the QualityRights intervention is required to ensure all staff members receive the required training, and the treatment is not compromised during this training phase. As only about two per cent increase in financial cost can improve the quality of mental healthcare significantly, the State government can plan for its scale-up across the State.**

Key words Cost - hospital - India - mental health - QualityRights

Recognizing poor awareness about symptoms of mental illness, myths and stigma related to it, lack of knowledge about treatment availability and potential benefits of seeking treatment, the National Mental Health Programme (NMHP) in India was launched in 1982 with the objectives of ensuring availability and accessibility of minimum mental healthcare for all in the future, promoting community participation in the mental health service development and to stimulate efforts towards self help in the community[1]. The District Mental Health Programme (DMHP) under NMHP was first implemented in Bellary district of Karnataka State during 1986-1990 to ensure early detection and treatment of mental health conditions by training the general physicians for diagnosis and treatment of common mental illnesses[1]. The extension of the programme in other districts started since 1999 onwards. The health workers were also trained in identifying mentally ill individuals under this programme. Public awareness was generated through information, education and communication (IEC) activities[1].

In a 1997 Indian Supreme Court decision, the National Human Rights Commission was given the mandate to initially monitor and supervise the performance of two mental health hospitals in India, eventually, the mandate was extended to all similar mental health hospitals[2]. After analyzing the status of 37 mental health hospitals, the commission made several recommendations to improve their infrastructure as well as the wellbeing of the affected individuals. The situation eventually improved as per a site visit report of the commission in 2012; however, the Committee found a chronic lack of psychiatric beds, overcrowding in the hospitals, lack of investigation facilities and persistence of practices such as unnecessary restraint[2].

In its comprehensive mental health action plan for the period 2013-2020 adopted by 194 member States in 2013, the World Health Organization (WHO) identified quality and respect for human rights as priority areas of action[3]. Based on the United Nations Convention on the Rights of Persons with Disabilities, the WHO launched the QualityRights initiative in 2013[4,5]. It has five main objectives: (*i*) to improve the quality of care in mental health services; (*ii*) to create community-based and recovery-oriented services that respect human rights; (*iii*) to promote human rights, recovery and independent living in the community; (*iv*) to develop a movement of people with mental health conditions to provide mutual support and influence policy decisions; (*v*) to reform national policies and legislation[5]. Gujarat, a State in western India with a population of 60.38 million people, was chosen as the initial implementation site for the QualityRights intervention because it has been at the forefront of mental health reforms in the country since it developed of a comprehensive mental health policy in 2012.

Worldwide, investment in mental health is quite limited with a similar situation in India, where only a small proportion of public expenditure is directed towards health[6,7] and an even smaller amount towards mental health. Scaling up of any intervention depends on various factors including effectiveness/impact and operational and financial feasibility. Cost analysis of a programme/intervention provides information on the amount of money and other resources required for implementing such a programme, as well as the cost of scaling up. Therefore, cost information along with other evidence helps decision-makers while prioritizing and allocating funds.

So, the main objective of this study was to estimate the cost of implementing the QualityRights programme in Gujarat, India. Apart from understanding the total resource requirement for implementing such a programme, contribution of different cost components in the total cost can help the policymakers understand

the major cost drivers. This eventually helps while planning for scaling up a programme across a state. In this study, the costs of providing public mental healthcare in three public health facilities in Gujarat were also calculated. The cost of the QualityRights programme will be over and above the general mental healthcare cost. Hence, the cost of mental healthcare and QualityRights Gujarat will inform the policy makers how much additional money and other resources will be required to scale up the QualityRights programme across the State.

Material & Methods

The intervention: Nine mental health facilities across Gujarat were included in an assessment of the QualityRights programme from May 2015 to June 2016. Of these, six facilities (three mental health hospitals, two psychiatric units in general hospitals attached to medical colleges and one psychiatric unit in a district general hospital) were assigned to the intervention group and three facilities (one mental health hospital, one psychiatric unit in a general hospital attached to a medical college and one psychiatric unit in a district general hospital) were included in the comparison group.

This study was performed in accordance with the Declaration of Helsinki. The study was approved by the Institutional Ethics Committees of the Indian Law Society, Pune; B.J. Medical College & Civil Hospital; Hospital of Mental Health, Ahmedabad; and Sumandeep Vidyapeeth, Vadodra, India, respectively.

Quality and human rights assessments were carried out at all intervention and comparison sites at baseline and 12 months following the implementation of the intervention using the WHO QualityRights assessment toolkit[4,5]. Details of the programme and the assessment are documented elsewhere[8].

Sources of data: For calculating the cost of the intervention, quantity, duration and number of participants in each activity related to the intervention were collected from all intervention sites. A standard pre-tested questionnaire (Supplementary Material) was shared with all intervention sites and respective researchers at those sites collected the data as and when the intervention activities took place. For calculating the cost of usual mental healthcare, data were collected from three sampled facilities by a team of two researchers along with the respective researcher at the facility. The main data sources were the hospitals' activity as well as accounting reports. Data on outpatient visits, bed-days and admissions were collected from the respective hospital's medical records section. Complete information on human resources and their salaries were collected from the payroll section of the hospitals. Details of other recurrent expenditures such as drugs/medical supplies, laboratory and radiology materials, office supplies, fuel/lubricants, electricity, water, internet, telephone, cleaning and maintenance were gathered from the annual expenditure report of the respective hospital.

All the data required for calculating the cost of usual mental healthcare were collected for the fiscal year 2014-2015 (April 2014 to March 2015) and data related to the intervention were collected during 2015-2016. All costs were first calculated using 2015-2016 prices and then converted into 2020 prices using the consumer price index for India[9]. The average exchange rate for the year 2020, 1 United States Dollars (US $)=74.132 Indian Rupees (₹), was used for conversion.

Costing methodology: Cost analysis was conducted in two steps. In the first step, the costs of providing usual mental healthcare in public mental health facilities in Gujarat were estimated. Even though the QualityRights intervention was implemented in six public and three other mental health facilities were selected for comparison, costs of providing usual mental healthcare were calculated only for three types of public mental health facilities that were included in the intervention: one large mental health hospital with 317 beds (hospital 1); one small mental health hospital with 27 beds (hospital 2) and one psychiatric unit in a district general hospital with 10 beds (hospital 3) given the time and budget constraints of the project.

Costs of providing usual mental healthcare were calculated using the standard costing method suggested by Drummond *et al*[10] and following other hospital costing studies in India[10-13]. Costs were calculated from the health systems' perspective. The main cost categories were personnel, capital costs and all other recurrent expenses. Personnel costs included salaries and fringe benefits (*e.g*. provident fund, insurance coverage, travel allowances, *etc*.) for all staff engaged in providing mental health services. In the general hospital with a psychiatric department (hospital 3), staff members were also involved in activities other than mental healthcare, so personnel costs were apportioned based on the time spent on

mental healthcare. Items with a useful life of more than one year were considered capital items. The useful life of a building was determined to be 20 yr, the useful life of vehicles and furniture was assumed to be 10 yr, and the useful life for equipment was seven years, as defined in previous costing studies in India[11]. A three per cent discount rate was used to calculate the annual depreciation cost of capital items including buildings, equipment, furniture and vehicles[14]. Recurrent expenses included salaries, drugs, medical and, office supplies, laboratory materials, laundry, kitchen and utilities such as electricity, water, telephone and internet. For the psychiatric unit at the district general hospital, all expenses were apportioned for mental health treatment based on allocation criteria used in various costing studies[11,15]. For example, electricity and water expenses were apportioned based on the floor area used for treating people with mental health conditions, while telephone and internet expenses were apportioned based on the number of full-time equivalent staff engaged in mental health treatment as compared to the total full-time equivalent staff in the hospital. Laboratory, laundry and kitchen expenses were apportioned using bed-days for people with mental health conditions as compared to the total bed-days of other patients.

Total costs of providing usual mental healthcare were calculated as the sum of personnel, capital and all other recurrent expenses. Total costs were divided by the number of outpatient visits and inpatient days to calculate cost per outpatient visit and cost per bed day, respectively.

In the second step, additional costs related to the QualityRights intervention were calculated using an ingredients based approach, where resource quantities were multiplied by their respective unit prices[16]. Major activities within the intervention included assessment visits at intervention and comparison sites, meetings to prepare improvement plans, meetings of the core group at each intervention facility to facilitate the effective implementation of the intervention, training of trainers and onsite training on several topics including the rights of persons with mental health conditions, alternatives to seclusions and restraints, recovery-oriented care and effective communication skills. As part of the intervention, family support groups (*Saathi*) were formed and regular meetings were conducted to provide emotional support and enable family members to actively participate in the care provided to their relatives. *Maitri,* the peer support groups, developed a network of service users to actively help and support each other. An innovative aspect of this programme was to introduce peer support volunteers (who received an honorarium equal to the minimum daily wage) who had personally experienced various mental health conditions and were able to assist others with similar experiences in their recovery journey.

To calculate both the financial and economic costs of the intervention, all activities related to this intervention were identified. Financial costs represent the actual expenditure on goods and services purchased. Costs were thus described in terms of how much money has paid for the resources used. The financial cost of QualityRights intervention included actual expenses incurred during different activities related to the interventions such as training, meeting and resources used on printing and stationery, refreshments, travel expenses and per diem. Actual payments to the peer support volunteers were also added to the financial cost calculation. Economic costs, also referred to as opportunity costs, are defined as resources that have been foregone because for alternative uses[17].

Economic costs typically include valuation of all inputs required for the intervention, for example, valuation of time including volunteer time related to the different activities of the programme, valuation of donated items, *etc*. In QualityRights intervention, time spent by various staff members in each activity related to the intervention was identified and valued based on the proportional time spent for the activity multiplied by their hourly gross salary. For example, if a staff nurse spent 10 h of her time for an intervention activity, her 'hours spent' was multiplied by her 'hourly wage' to obtain her time cost related to that activity. It should be noted in this context for *Saathi* and *Maitri* meetings, time costs were calculated only for the facility staff involved in these meetings, time costs of the family members and service users were not considered in the economic cost calculation. The various intervention activities were assessed based on programme data; however, salaries and other expenses (*e.g*., travel allowances) were adjusted using standards identified by the Gujarat government for public health sector staff and all costs were annualized.

Results

Costs of providing usual mental healthcare: Table I lists the basic characteristics of three study hospitals from the intervention group that was used to calculate the costs of providing usual mental healthcare. Total

Table I. Basic information about the study hospitals from the intervention group, April 2014-March 2015

Study hospitals	Type of hospital	Number of beds	Total admissions	Average length of stay (days)	Occupancy rate (%)	Number of visits
Hospital 1	Mental health hospital	317	1512	66	86	64,643
Hospital 2	Mental health hospital	27* (16)	322	36	117	19,539
Hospital 3	Psychiatric unit in district general hospital	10**	31	9	7	1639

*Sanctioned bed 16, operational bed 27; **for people with mental health conditions only

costs of providing mental healthcare were ₹ 145.0 million in hospital 1, 23.9 million in hospital 2 and 2.9 million in hospital 3 at 2020 prices (1 US $=₹ 74.132) (Table II). Personnel costs were the major cost driver, and these ranged from 45 to 61 per cent of total costs across the various types of facilities. Capital costs had the second largest share in two hospitals and ranged from 15 to 34 per cent of total costs.

Variations in the total costs of providing usual mental healthcare and outputs of the study hospitals led to wide variations in unit costs (Table II). Cost per outpatient visit was the lowest at ₹ 402 in hospital 2, followed by ₹ 465 in hospital 1 and ₹ 1146 in hospital 3. Cost per bed day ranged from ₹ 995 to 3771.

Cost of implementing the QualityRights intervention: Total costs of implementing the QualityRights intervention in six public mental health hospitals in Gujarat were the sum of time cost and financial cost and it ranged from ₹ 0.59 to 2.59 million, depending on the intervention activities performed at each facility (Table III). The average cost of implementing the intervention at the study hospitals was ₹ 1.33 million (SD 796,137). Time costs for participating in various intervention activities were a major component and ranged from 69 to 79 per cent of total intervention costs across the hospitals. Most of this time was spent on training at intervention sites (except for hospital 4), with costs ranging from ₹ 0.10 to 1.33 million, for an average time cost per trainee of ₹ 2298. Total number of onsite training covering topics on recovery oriented care, effective communication skills, rights of persons with mental illness and alternatives to seclusion and restraint ranged from 13 to 51 depending on the size of the hospital and consequently the number of staff. Another major time spent was on conducting core group meetings and in six facilities the core group met 24 to 58 times during the intervention period. The number of meetings with the family members (*Saathi*) ranged from 11 to 32 and the average duration of the meeting was 1.5 h. Number of meetings with the peers (*Maitri*) ranged from nine to 36 across the facilities with the same average duration as *Saathi* meetings.

Costs of usual care & costs of intervention in Gujarat: Considering only financial costs; *i.e.* excluding the time costs of healthcare providers, QualityRights intervention costs were ≈0.4 per cent of the total costs of providing usual mental healthcare in a large mental health hospital, and ≈seven per cent of the total costs in the psychiatric unit of a district hospital. This difference in intervention costs between the various facilities is likely due to the economies of scale achieved by the large mental health hospital.

During the study period, Gujarat had four public mental health hospitals, 20 mental health facilities in public general hospitals and 14 medical colleges with psychiatric departments which served ≈280,000 persons with mental disorders every year. Using the study hospitals' estimated costs of delivering mental health services, costs of providing usual care in all public mental health hospitals in Gujarat were estimated, assuming the structure and function of public hospitals were similar across Gujarat. For example, the estimated cost of providing mental health services in the large mental health hospital (hospital 1) was used to estimate the total cost of delivering usual mental healthcare in the other large mental health hospitals in Gujarat. Similarly, using the results from hospital 3, costs of providing care at psychiatric units of other hospitals were estimated. The estimated cost of providing usual mental healthcare across the State of Gujarat amounts to ₹ 436.64 million as per 2020 prices. Extrapolating total QualityRights intervention costs (financial and time cost) to all mental health hospitals in Gujarat (four public mental health hospitals, 20 mental health facilities in public general hospitals and 14 medical colleges with psychiatric departments), cost to the government to implement the QualityRights intervention in the entire State would be ₹ 32.89 million as per 2020 prices – about 7.5 per

Table II. Unit costs of providing usual mental healthcare in study hospitals from the intervention group, calculated for 2020 in Indian Rupees (₹)

Study site/cost parameters	Total cost	Units	Output	Unit cost
Hospital 1				
Outpatient department	30,076,246	Number of visits	64,643	465
Inpatient department	103,172,833	Bed days	99,422	1038
Total cost of providing mental healthcare	145,023,144			
Hospital 2				
Outpatient department	7,845,156	Number of visits	19,539	402
Inpatient department	16,089,543	Bed days	16,176	995
Total cost of providing mental healthcare	23,934,699			
Hospital 3				
Outpatient department	1,877,765	Number of visits	1639	1146
Inpatient department	1,025,825	Bed days	272	3771
Total cost of providing mental health care	2,903,589			
1US $ = ₹ 74.132				

Table III. Cost of QualityRights intervention (2020 in ₹)

Activities	Hospital 1	Hospital 2	Hospital 3	Hospital 4	Hospital 5	Hospital 6
Human resources cost						
Assessment visit	47,016	40,142	40,118	38,729	48,040	41,147
Follow up assessment visit	43,885	40,830	39,747	38,729	46,395	41,147
Improvement plan meeting	77,830	37,348	23,438	15,919	106,450	65,011
Core group meeting	247,779	71,444	47,919	178,236	249,176	100,595
Master trainings	239,050	50,616	56,586	61,196	188,057	26,450
On site trainings	1,331,617	601,955	431,031	103,870	908,155	217,230
Inter-site visits	34,519	14,103	16,833	12,614	24,953	55,681
Other meetings (Saathi and Maitri)	2689	15,165	4848	2603	7315	28,242
Total human resources cost	2,024,386	871,604	660,518	451,895	1,578,541	575,502
Other recurrent expenses related to intervention						
Printing, stationery and refreshments	184,809	57,748	55,887	38,549	153,050	76,378
Travel/dearness allowance	139,901	81,654	71,293	72,986	173,222	75,328
Payments to PSVs	242,413	88,448	65,517	29,483	134,310	101,551
Total recurrent expenses	567,123	227,850	192,698	141,018	460,582	253,257
Total intervention cost	2,591,510	1,099,454	853,216	592,913	2,039,123	828,759
1US $ = ₹ 74.132. PSVs, peer support volunteers						

cent increase in cost over and above usual mental healthcare cost. Considering only financial costs, an additional investment of ₹ 8.37 million will be required (about 2% increase in financial cost) to implement the QualityRights intervention across the State of Gujarat.

Discussion

To the best of our knowledge, this is the first study to estimate the cost of implementing QualityRights intervention in India. The study also estimated the cost of providing usual mental healthcare in Gujarat. Among the three intervention hospitals where costs of providing usual mental healthcare were calculated under this study, cost per outpatient visit and per bed day were higher at the psychiatric unit of the district general hospital as compared to the other two mental health hospitals, due to fewer visits and admissions in the former. Costs per outpatient visit and inpatient

stay estimated in three mental health hospitals in this present study were higher when compared to the costs per outpatient visit and inpatient stay estimated in previous studies for public district and tertiary care hospitals providing general healthcare in India[11]. Chatterjee *et al*[11] estimated the cost per outpatient visit for physical healthcare in the public district general hospital at ₹ 112, while the cost at public tertiary care hospitals providing general healthcare at ₹ 287 at 2020 prices (after adjusting for inflation). In the present study, costs per outpatient visit in mental health hospitals ranged from ₹ 402 to 465. The previous study estimated the cost per bed day for physical healthcare at ₹ 468 in a public district general hospital and ₹ 729 in a public tertiary care hospital at 2020 prices[11], while the present study shows that costs ranged from ₹ 995 to 1038 at specialized mental health hospitals. The relatively higher unit costs in the mental health hospitals (ranging from ₹ 402 to 465 for outpatient visits and ₹ 995 to 1038 for inpatient bed days) were probably due to the difference in patient loads at hospitals providing general healthcare *vs*. mental health hospitals. While the previous study[11] reported 293,119 outpatient visits in the district general hospital, the maximum number of outpatient visits in the mental health hospital was found to be 64,643 in one year.

The occupancy rates in mental health hospitals were also higher than the same reported in the previous study for public district and tertiary care hospitals providing general healthcare. Occupancy rates in mental health hospitals ranged from 86 to 117 per cent, *vs*. 65 to 72 per cent in general public health facilities providing general healthcare[11]. The average length of stay varied from one to two months in mental health hospitals but was only nine days in the psychiatric unit of the district hospital. It is likely that longer stays were due to more severe cases being admitted into mental health hospitals than into general health public facilities. Another reason for longer stays at mental hospitals may be that the families of individuals with mental illness delayed their discharge due to the absence of mental healthcare in the community.

The high occupancy rates in mental hospitals are a reason for concern. Occupancy rates above 100 per cent, as seen here, undoubtedly result in a reduction in the quality of services provided and may lead to the denial of care to those most in need of support. Overcrowding in mental health hospitals was reported in the assessment visit report of the National Human Rights Commission as well as mentioned in QualityRights Theme 1[2,5]. To address this problem, the government must provide increased resources for new mental health institutions and care, as well as health promotion initiatives to educate families about mental health conditions, treatment options and how best to support loved ones during treatment and the recovery process outside the hospital setting. Anti-stigma initiatives are also needed to reduce the stigma associated with mental health conditions and the prospect of recovery.

The QualityRights intervention programme showed promising results. For example, the WHO QualityRights Toolkit included five main themes[8], most of which were improved at intervention facilities as compared to comparison facilities: ratings for Theme 1, Theme 2 and Theme 4 were substantially improved. However, no changes were observed in ratings for Theme 5 and a non-significant improvement was observed in standards in Theme 3 at intervention facilities[8]. The finding related to Theme 5 is consistent with the longer lengths of stay in mental hospitals and supports the need for policy action to develop community support programmes for individuals with mental health conditions. No change in the ratings of Theme 5 also highlights the lack of community or outreach programme related to mental health in Gujarat. However, there was the gradual improvement of community care for mental illness in the State[18,19]. Under DMHP, in Gujarat, district general/civil hospitals are linked with adjoining mental health hospitals or mental health departments of medical colleges to improve mental health service delivery, training and IEC activities[18]. At few selected sub-district (taluka) levels also, in line with DMHP, grants were provided to taluka hospitals to upgrade their OPD services and IEC activities related to mental health and support for medication[18]. *Atmiyata*, a community-based mental health intervention implemented in a rural district of Gujarat, also focussed on promoting wellness and reducing distress through community volunteers[19].

The major cost component of the QualityRights intervention was time costs which ranged from 69 to 79 per cent of total costs across intervention sites. This illustrates the labour-intensive nature of the intervention, which was delivered to different groups of staff members in hospital settings: physicians, psychiatrists, nurses, attendants, administrative, housekeeping and security personnel. Like many other low- and middle-income countries, India has a dearth of human resources in the health sector. While

increasing human resources in the health sector and particularly in mental health should be a priority in government policy, however, in the short run, it will be vital to ensure appropriate planning during the scale-up phase of the QualityRights intervention to ensure all staff members receive the required training, and to ensure that treatment is not compromised during the training phase.

In the initial Gujarat QualityRights programme, introducing peer support volunteers was another core component. These volunteers were previous or current service users who assisted other service users to prepare their own recovery plans and facilitated peer support groups at intervention facilities. They worked approximately 24 h/wk and were paid ₹ 3000 per month from programme funds. One of the major challenges of this kind of quality improvement initiative is sustainability. On completion of the initial implementation, the Gujarat State Mental Health Authority created a protected budget for establishing peer support volunteers on an ongoing basis. Currently, 35 peer support volunteers are employed through this budget at the six intervention sites, and the government has committed to extend this funding to other public mental health facilities over time.

There were some limitations in this study. Firstly only the additional resource requirements for implementing QualityRights interventions in Gujarat were reported. Affordability of the additional requirements or cost savings (if any) because of the intervention were not estimated. Second, the cost of providing usual mental healthcare was estimated for three types of public hospitals in Gujarat. The extrapolation to all public mental health hospitals was based on the data from these three hospitals with the assumption that other hospitals in Gujarat were similar in structure and function. Given the size of the country and variations of health facilities across the country, the estimates were not used to extrapolate the cost for the rest of the country. Third, cost projections were made based on data from the public mental health hospitals in Gujarat, no private mental health facilities were considered in this study. Therefore, the cost of providing mental healthcare and the additional resource requirement for a similar intervention in the private sector could not be calculated. Fourth, the cost of the QualityRights intervention was calculated from the perspective of a health system. The societal perspective[20], the broadest viewpoint, is perhaps more suitable for the current study; however, collecting data from caregivers and family members of the service users were beyond the scope of this study; hence, a relatively narrow perspective was selected. Finally, sensitivity analysis is an important component of cost analysis; however, as data related to the QualityRights intervention were collected prospectively by the researchers based on intervention and control sites, we expect that the cost of the intervention is unlikely to vary with varying cost line items. Hence, no sensitivity analysis was conducted in this study.

Overall scaling up the QualityRights intervention across the entire State of Gujarat would require about two per cent increase in financial costs, or 7.5 per cent increase in all costs including time, over and above the provision of usual mental healthcare at public health facilities in Gujarat. This additional investment required to enhance quality and human rights in mental health hospitals is insignificant when compared to the investment planned under NMHP. Based on the findings of the evaluation of the programme, this small additional investment at least is expected to lead to improved staff performance, service user satisfaction and empowerment, and to reduce caregiver burden[8]. With an additional two per cent financial investment in the QualityRights intervention, the State of Gujarat has the potential to be a pioneer in providing quality mental health services that respect and promote human rights. In conclusion, the study findings indicate that implementing the QualityRights intervention will not significantly increase the government's mental health budget but will substantially improve the mental and physical health of service users and the treatment environment. Quality improvement is an important aspect of fostering access to mental health services, so policymakers in Gujarat and across India should consider incorporating QualityRights interventions in all public mental health facilities.

Disclaimer: This study is part of a larger study, and the details of the study sites will be available from the corresponding author on request.

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