ILAM SIRAR IRUDHAYA PADUKAPPU THITTAM

HEART SURGERY PROGRAMME FOR SCHOOL CHILDREN IN TAMIL NADU

Problem Statement

Congenital anomaly includes any morphological, functional, biochemical or molecular defects that may develop in the embryo and fetus from conception until birth, present at birth, whether detected at that time or not. The incidence of Congenital Heart Disease (CHD) depends primarily on the number of small Ventricular Septal Defects (VSD) and this number depends upon how early the diagnosis is made. The incidence of moderate and severe forms of CHD is about 6/1,000 live births and 75/1,000 live births if tiny muscular VSDs present at birth and other trivial lesions are included.

Tamil Nadu state conducted a community based survey of visible congenital defects including CHD during 2004-05. The survey covered 47.2 million population, of which 27% (12.8 million) are children in the age group of 0-15 years. 1.25% of total children identified with visible congenital anomalies. Considering the need, the Tamil Nadu introduced the scheme for school children for early diagnosis and treatment of heart diseases in the state.

Programme Description

"IlamSirarIrudhayaPadukappuThittam" school children screening and treatment programme for heart diseases was announced in the floor of state assembly in April 2008. School Health Programme (SHP) is a continuous ongoing programme for government and government aided schools in TN. A special drive was undertaken during SHP to identify suspected acyanotic, cyanotic and mixed cardiac cases. Until December 2008, TN state illness society released funds based on need and demand from operating hospitals as per amount specified for different surgeries by directorate of medical services. During 2009-10, NRHM released fund under risk pooling for private hospitalization, which was diverted to district health society. The chairperson, district health society monitor each and every case and release the fund to private hospitals. This enabled the state to initiate action on effective and visible risk pooling and social health insurance to provide health security to the poor by ensuring accessible, affordable, accountable and good quality hospital care.

Type of Surgery	Case wise assistance	Revised Assistance
Closed Heart surgery	10,000	20,000
Open Heart surgery (Simple)	30,000	50,000
Open Heart surgery (Complex)	70,000	1,00,000

Table 1. Case wise assistance for school children heart surgery

There are 28 accredited government/private hospitals enrolled for these surgeries with standard quality control mechanism through insurance companies. Memorandum of Understanding (MoU) has been signed with these 28 hospitals under *ilamsirarirudhayapadukapputhittam,* which include list of diseases under three different categories. The support under the scheme includes mobility support for parents and student, hospital stay and follow-up investigations and interventions.

Table 2. Category wise list of heart diseases

Category A	Category B	Category C
Closed Heart Surgery	Simple Open Heart Surgery and Major Heart Surgery	Complicated Open Heart Surgery
PDA – Ligation	ASD / VSD	Intra Cardiac Repair for Cyanotic Heart Disease (TOF, TAPVC, TGA, TA, Truncus Arteriosus, Pulmonary Atresia)
Pericardiectomy	Valvular Pulmonary Stenosis	DORV with PS
Closed Mitral Commissurotomy for Mitral Stenosis	Valve repairs (OMV, OAV, OPV)	Arterial Switch for TGA
	Coarctation of Aorta Repair	Fonatan's IBD Glenn Shunt
	Systemic Pulmonary Shunt	A.P. Window
	Baloon Valvotomy	Valve replacement
	Baloon Septostomy	Complete AV Canal defects
	PA Banding	Permanent Pace Maker Implantation

Program Impact

Around 10,000 suspected students were identified at PHC level and 24% of students recommended for surgery. A specialist team consisting of cardiologist, cardiothoracic surgeon and general physician assessed and identified 81% of the total recommended students fit for surgery. 93% (1813) of them underwent surgery of which, 135 students were covered under the insurance scheme. The graph below graph depicts Health Unit District (HUD) wise list of surgeries conducted from 2008 to 2010. These initiatives have had a positive impact on government facilities in terms of improvement in infrastructure and human resources for health. Many of the private hospitals are in pipeline to get accredited under the scheme. The scheme established strong linkage between preventive and curative health care. The scheme also had a positive impact on health sub-center level in terms of community mobilization for CHD.

The linkage between insurance companies and private hospitals enabled the state government to have a dialogue with private institutions to bring innovative insurance products for surgical and medical interventions. At community level, a visible impact is seen in utilizing VHSC untied fund for mobility support for selected cases in the village. The available data reveals that most of the beneficiaries belongs to marginalized and poor communities with lack of access to the health care facilities.

Scalability

The percentage of vulnerable sections of society using public health facilities is a benchmark for the performance of public health institutions. Unregulated private health facilities that cause health distress leads to vicious circle of indebtedness and poverty as experienced by Tamil Nadu during Tsunami were able to cover under the private health insurance schemes. The scheme *PALLI SIRAR IRUDHAYA PADUKAPPU THITTAM*therefore established a launching pad for setting up effective risk pooling system. Involvement of government agencies, NGOs and insurance providers had helped to generate more confidence in the risk pooling arrangement. Many studies have shown acceptable health indicators of socially and economically deprived groups in Tamil Nadu and in addition NRHM makes conscious efforts to address any such inequity in the state. Hence, this model can be adopted at national level to provide affordable health care services to marginalized and poor communities in the country.

Annex:

Graph: Health Unit District wise surgeries conducted from 2008-09 to 2009-10