



## Global Grant Project Brief- Rotary Dialysis Center at Kedgaon, Pune

### Rotary's Area of Focus:

DISEASE PREVENTION & TREATMENT



### Chronic kidney disease (CKD)

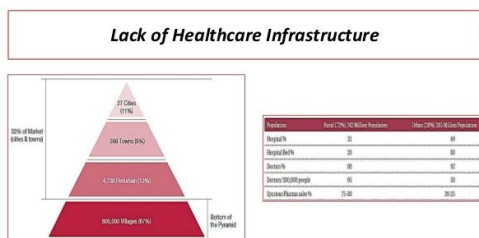
There are approximately 7.85 million people suffering from chronic kidney failure in India. According to The approximate prevalence of CKD is 800 pmp and incidence of ESRD is 150-200 pmp.

With a severe shortage of donor organs, the number of patients needing dialysis multiple times a week is rising steadily. The cost of this treatment can be punishing especially to the economically challenged sections of society.

For example, a recent analysis estimated that a single HD session costs around USD 30 in India, so twice a week dialysis for a year would cost around USD 3,000. The unadjusted gross national income per capita in India is USD 1,040, and two-thirds of the population of 1.2 billion live on less than USD 2 per day. Thus without financial support dialysis will remain beyond the financial reach of many in India. Frequent hospitalizations and health parameter monitoring add to the financial burden.

The answer to this mammoth problem is timely intervention. Medical Journal reported that diabetes accounts for 25%~30% of chronic renal failure and hypertension for 10% of the patient load on waiting lists for kidney transplantation according to an article published in Clinical Kidney Journal.

A study from a rural belt of Karnataka, where population had a mean age of  $39.88 \pm 15.87$  years with 3.82% prevalence of diabetes and 33.62% of hypertension. Authors found 6.3% prevalence of CKD stage 3. Possibly with shifting population the difference between urban and rural areas is getting blurred.



The availability of infrastructure in Rural areas however remains at less than 15-20% of that in urban.

Rural population which is 72% gets only 33% share of infrastructure and 28% urban population 67%.

Number of doctors per 100,000 population in urban area is 50 in Urban area and 5 in rural area. Global average is 1300.

**Kedgaon** is a Village in Daund Taluka in Pune District of Maharashtra State, India. It is located 63 KM towards East from District head quarters Pune. 11 KM from Daund. 199 KM from State capital Mumbai. Kedgaon Pin code is 412203. Varvand ( 6 KM ), Khopodi ( 6 KM ), Deulgaon Gada ( 7 KM ), Khutbav ( 7 KM ), Galandwadi ( 7 KM ) are the nearby Villages to Kedgaon. There is no other dialysis center in 30 sq km area.



## Rotary Club of Pune Magarpatta Elite



### Global Grant Project Brief- Rotary Dialysis Center at Kedgaon, Pune

#### Project Highlights

a) Total Project Investment	\$	40,450	INR	2,588,800
b) Benefit delivered to society	\$	292,500	INR	1,87,20,000
c) Direct Beneficiaries (Target)		100		
d) Dialysis Sessions (Target) with 3 machines		2600 x 8 years		20800
e) Cost per dialysis	\$	9.38	INR	600
f) Benefit to society per dialysis session	\$	14.06	INR	900

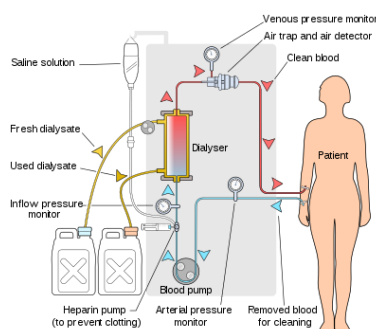
It can be seen from above table that this project is able to deliver **723%** of value to society on the invested amount over 8 year period giving Over **90%** returns on investment each year.

Project Outcome : **Primary Goal** of the project is to provide financial assistance to rural patients with chronic kidney failure and make Hemodialysis treatment affordable to them. **Additional Goal** of the project is to spread "Prevention" message in society to educate them on lifestyle changes necessary to control diabetes and hypertension, which are two root causes of Chronic Kidney Failures.

Three Rotary Clubs from Pune district and oversees Rotary Clubs are partnering with our club for this project.

#### Operating Model

RCP Magarpatta Elite has received offer from Mayuresh Hospital, Kedgaon, Pune to set up Rotary Dialysis Center and they will provide place, trained dialysis technicians and at nominal cost to the Rotary sponsored Dialysis Center. RCP Magarpatta Elite has to in turn provide Hemodialysis machines to the center.



Mayuresh Hospital is a 50 bed hospital with local reputation for being socially oriented and provides its services to rural poor at discounted rates implementing various government health schemes.

Mayuresh Hospital has a fully operational Dialysis Center with all the necessary investments like place, 3 dialysis machines, RO water purification plant, material, skilled professionals like Dialysis Technician and Nephrologist. Thus ensuring sustainability of operations, best treatment, post treatment monitoring and counselling to the beneficiaries for last 1 year. There is queue built up with over 50 more patients waiting for additional facilities.

The complete responsibility of treatment is being taken up by Mayuresh Hospital. RCP Elite is focusing on providing finances for initial investments in augmenting capacity by adding 3 more dialysis machines and ensuring project sustainability.





## Rotary Club of Pune Magarpatta Elite



### Global Grant Project Brief- Rotary Dialysis Center at Kedgaon, Pune

#### Project Finances

Mayuresh Hospital to carry out Hemodialysis at discounted price to all patients from economically weaker section under this MoU. Mayuresh Hospital is providing Hemodialysis at discounted rate of \$ 9.38/- per session (commercial rate is \$ 23.44). Thus Rotary can deliver \$14.06 benefit in every dialysis session to each beneficiary.

The rated life of dialysis machines is 8 years and each dialysis session lasts on average 4 hours. Mayuresh Hospital has promised to carry out 2,600 dialysis each year on each machine. We propose to install 3 state-of-art next generation dialysis machines at the dialysis center. Thus total benefit delivered to society in 8 years will be \$292,500.

Rate used US\$ 1 = INR 64.00

#### Sources of funds

Description	Amount US\$	Amount INR	%
RCP Magarpatta Elite	5,633	360,533	14%
Local Partners Clubs	3,000	192,000	7%
District 3131	5,000	320,000	12%
International Partner Clubs	5,000	320,000	12%
International Districts	5,000	320,000	12%
Rotary Foundation	16,817	1,076,267	42%
<b>Total</b>	<b>40,450</b>	<b>2,588,800</b>	

#### Utilization of Funds

Description	Amount US\$	Amount INR	%
Dialysis Machines 3 Nos	29,400	1,881,600	73%
Provision for AMC (7 years)	4,922	315,000	12%
Documentation / Publicity	3,128	200,200	8%
Prevention trainings 16 Nos	3,000	192,000	7%
<b>Total</b>	<b>40,450</b>	<b>2,588,800</b>	

Rotary Club of Pune Magarpatta Elite is first **ladies only** Rotary club in our district 3131. We currently have 30 members and club was chartered in year 2015. We have done very innovative projects in last couple of years including setting up of **Human Milk Bank** at Noble Hospital, Pune under the **Mother and Child Care** Rotary Focus Area in 2016.

#### References

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4446915/>
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4886905/>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2845186/>
4. <http://www.dialysis.org.in/2010/06/cost-comparison.html>
5. <http://healthsciences.ac.in/july-sep-12/downloads/Chronic-Kidney-Disease-in-India.pdf>
6. <https://www.slideshare.net/prashantmehta371/challenges-in-indian-healthcare-sector>

