

Medical

Dimensions/Components of Medical

- Social/Economic status of HH,Individual etc.
(Income,Caste,Religion,Rich/Poor)
- Socioeconomic characteristics of
Village/Neighborhood(Rural,Urban,Metro etc)
- Institution - public,pvt, public in pvt; formal, informal health provider;
whether or not non-profit.
- Facilities in Neighbourhood/Village and their services offered
- Location aspect of getting treated outside, distance from major
hospitals and other health centers such as district center
- Medical goods aspects such as fees, inclusive of medicines or not;
allopathic, Insurance; Total Proportion of consumption expenditure on
Health and its relation to poor and rich
- Consumer evaluation of treatment, satisfaction and revealed
preferences
- Diagnostics and Treatment facilities

Dataset wise list of variables and Ideas

DS01 - Individual

Identifiers

Location

- URBAN2011 - *Rural/Urban*

- **URBAN4_2011** - *Rural/Urban income categories*
- **METRO** - *Largest 6 Metros or Other Metros*
- **METRO6** - *Cases in top 6 Metro Cities city wise*

Short Term Morbidity

SM10:EQ12 8.12 - *Went to Doctor for treatment?*

Keep if yes, around 34,000 valid cases.

Choice Decisions

- **SM14a:EQ13 8.14a** - *Who treated? - Public, Public w/Pvt, Pvt, Chemist etc.*
- **SM14b:EQ13 8.14b** - *Where treated? - home, this village, other town, other district?*
- **SM16:EQ13 8.16** - *Treatment type*
 - We can convert the categories into two that is allopathic and non allopathic and drop non-allopathic(Homeopathy, Ayurveda etc).
- **SM19:EQ13 8.19** - *Tests/Medicines inclusive in fees?*
 - Important credence characteristic since double role of medicine as well as advice as a single package. Interesting to note that this is the dominant case in India.
- **SM20:EQ13 8.20** - *(If SM19==0) Expenses Tests and Medicines*
- **SM21:EQ13 8.21** - *Travel Expenses*
 - We can calculate Travel Expenses as a ratio of Total Expenses
- **SM22:EQ13 8.22** - *Insurance Expenses*
 - Important as shows that hardly any medical insurance - public OR private. Also indicates utilization relating from whether or not have insurance variables IN15B1 and IN15B2 from DS02 dataset(given below)

Major Morbidity

MB19:EQ14 9.19 - Received Medical Advice for Major Morbidity?

Keep if Yes, around 20,000 valid cases.

Choice Decisions

- **MB21A:EQ15 9.21 - Who Treated?**
- **MB21B:EQ15 9.21 - Where Treated?**
 - We can compare Public/Private choice and Neighbourhood vs other town for Short Term and Major morbidity.
- **MB22:EQ15 9.22 - Where treated? 2nd sample**
 - Is this second opinion? I'm not sure. If so, then can reveal that second opinion towards public or private.
- **MB25:EQ15 9.25 - Total Medical Expenses**
 - Note the extremely high standard deviation - affordability might be more of an important factor now for E type treatment.
- **MB27:EQ15 9.27 - Test/Medicine costs**
- **MB28:EQ15 9.28 - Travel Costs**

DS02 - Household(Approx 42k observations)

Income/Social Identifiers

- **ID13:HQ3 1.13 - Caste category**
 - SC/ST and Non-SC/ST conversion.
- **Income/Social Identifiers**
- **IN14:HQ17 9.14 - Better off last 6–7 years?**
 - To show that increase in material standards and thus reduction in affordability burden. 50% report same while 38% report better off.

- **IN15B1:HQ18 9.15b** - *Health insurance govt*
 - 9.1% have
- **IN15B2:HQ18 9.15b** - *Health insurance private*
 - 2.1% have.

Household Consumption Expenditures -Medical/Total

- **C033:HQ24 14.33** - *Medical OPD expenditure*
- **C034:HQ25 13.34** - *Medical In-Patient expenditure*
- **COTOTAL** - *Total Household Consumption Expenditure*
 - Medical expenditure proportion in total HH expenditure
- **COPC** - *Total Household Consumption Expenditure(per capita)*
- **POOR** - *Is Poor? - COPC < Poverty Line(Tendulkar,2012)*
 - Consumption Expenditure of Medical per capita for Poor and Non-Poor to see difference
- **CG3:HQ26 15.3** - *HH self-evaluation as Poor/Middle/Comfortable*
 - 42% self evaluate as poor, 50.4 percent as Middle class.
- **DB2C: HQ27** - *Loan Purpose(If Loan - 22.5k valid cases*
 - Included because of the interesting result that 3.5k cases out of 22.5k valid cases taken loan for medical purpose, third highest after agriculture and marriage. Loan for marriage purpose is more than health.

Quality of Medical Care

QC1:EQ17 11.1 - *Visited medical facility in last 5 years? If QC1 ==1 then*

- **QC2:EQ17 11.2** - *Consulted whom? Govt,Pvt, Govt with Pvt etc*
- **QC3:EQ17 11.3** - *Location of treatment(Same village, another, town,district town etc)*
- **QC7** - *How did Doc treat you?*

- **QC8:** - *Waiting Time?*
- **QC11:EQ17 11.11** - *Health Facility ID?*
 - This is interesting as about 20 percent of health facilities uniquely surveyed in Data have been visited by the HH member. Coded as 1,2,3

DS03 - Eligible Women

Medical Care - Previous Childbirth(LB index)

Dummies

LB0 - *N births since January 2005*

LB0 != 0

LB5 - *Antenatal checkup*

If **LB5** == 1 proceed

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LB6A - *Checkup Government*

LB6B - *Checkup Private*

LB6C - *Checkup Government in private practice*

LB6D - *checkup at Home*

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LB7A - *checkup - see doctor?*

LB7B - *Checkup - see Nurse?*

LB7C - *Checkup - see Traditional Midwife*

LB7D - *Checkup - see Other*

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LB8 - *Antenatal home visit by public health worker?*

LB9 - *Antenatal home visit - what kind of public health worker (doctor, nurse etc)*

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LB11 - *N checkups during pregnancy*

LB11 != 0 then following applies

Diagnostics

Basic diagnostics imply effort and necessity whereas more complex ones require ability, formal training as well as access to equipment.

LB12A - *Weight checked?* basic/necessary/easy

LB12B - *BP taken?* basic/necessary/easy

LB12C - *Blood test done?* basic level 2

LB12D - *Urine Test done?* basic level 2

LB12E - *Abdomen exam?* medium

LB12F - *Internal Exam?* medium

LB12G - *Sonogram/Ultrasound Done?* advanced/complex

LB12H - *Aminocentesis?* advanced/complex

Treatment

LB14 - *Iron/Folic Acid?* basic/necessary

LB15 - *tetanus?* basic/necessary

LB28 - *Type of Delivery*

Normal, Forceps, Caesarian

unnecessary caesarian points to medical profiteering, given the fact that that adequate speciality exists which makes caesarian more profitable without effort cost or actual cost being a bottleneck – rich doctors might offer more caesarian option than poor as a hypothesis

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DS05 - Medical Staff

CLINICID - *Surveyed medical facility*

MQGOVT - *Govt/Medical?*

MF26 - *Distance to Village from clinic?*

might indicate location choice aspect

0 to 99 range mean = 5.31 median = 1 SD = 10.95

MF28 - *Degree?*

Keep if MBBS == 1(code 7) to isolate doctors from other health practitioners. Ayurveda and Homeopathy are also coded(as 8 and 9; MBBS as 7)

MF29 - *Private Medical Practice?*

DS06 - Medical Facility

MC14 - *Whether clinic at location of PSU?*

If MC14 != 0 then the next applies.

MC14A - *Distance from sample place(km)*

might be useful in location choice of doctor.

MF1 - *Type of Facility*

MF2A - *Allopathic?*

Keep if MF2A ==1

use in agency and incentive problems, do subsidized offer better outcomes in rich areas, poor areas. for rich consumers/poor consumers?

MF3A - *Funded by Govt?*

MF3B - *Funded by Religious Organization?*

MF3C - *Funded by Charity/NRI funds?*

MF5A - *Distance from district hospital*

district center hospital can serve as benchmark for proper complex treatment facilities.

MF5B - *Distance from nearest Community Health Center(km)*

Physical Infrastructure of Medical Facility

Observable information of Patient

From basic necessities to more specialized factors

MF6A - *Number of beds for overnight stay*

MF8A - *Hours of electricity/day* basic

MF8B - *electricity interruption* basic

village characteristics imply outages which is severe detriment to any medical facility

MF8C - *electric generator have?*

32% do, electric outages very significant

electric generator needs also increase costs and for private means higher prices

MF10A - *Toilet facilities* basic

35% have no toilet, 22.5% have pit latrines

MF11A - *First visit registration fee?*

50% do but its nominal as by MF11B

MF11B - *Registration fee if MF11A==1*

MF12A - *Routine visit fee for simple problems such as diarrhea*

Akin to C treatment in credence goods

MF12B - *MF12A is medicine included in the fee? 0 if yes else non 0 values = medicine costs*

Medical Equipment/Infrastructure

MF13A - *Immunization?* basic

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MF13B - *Contraception - pills* basic

MF13C - Contraception - IUD(copper-T) basic

MF13D - Contraception - Male Vasectomy medium

MF13E - Contraception - Female Sterilization medium

MF13F - Contraception - Injection medium

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MF13G - Incision of abscesses/boils? basic

MF13H - Saline IV? basic

MF13I - Broken Bones? basic

MF13J - Gynaecology? medium

MF13K - STDs? medium

MF13L - DOTS - TB? medium

MF13M - Prenatal? medium

MF13N - Eye exam? medium

MF13O - Diarrhoea? basic

MF13P - Wound dressing? basic

MF13Q - Wound stitching? basic

MF13R - Malaria? medium

MF13S - Fever? basic

MF13T - Rabies? basic

MF13U - Childbirth? medium

MF13V - Abortion? medium

MF13W - *Blood Transfusion?* advanced

MF13X - *Cataract Surgery?* advanced

MF13Y - *Abdominal Surgery?* advanced

MF13Z - *Heart surgery?* advanced

Diagnostic Facilities

MF14A - *Pregnancy Test?* basic

MF14B - *Haemoglobin test?* basic

MF14C - *WBC Count?* medium

MF14D - *HIV/AIDS?* medium

MF14E - *Cholestrol?* medium

MF14F - *Urine(sugar/protein)?* medium

MF14G - *Urine culture?* medium

MF14H - *Stool* basic

MF14I - *Chlorine in water test?* medium

MF14J - *Malaria test?* medium

MF14K - *Cerebral Malarial Parasite test?* medium or advanced

MF14L - *TB?* medium

MF14M - *Pap-smear(cervical cancer test)* advanced

Medicine Availability

MF15A - *Penicillin?* antibiotics``basic

MF15B - *Ampicillin?* antibiotics``basic

MF15C - *Tetracycline?* antibiotics``basic

MF15D - *Ciprofloxacin* antibiotics``basic

MF15F - *Iron/Folic Acid* basic

MF15G - *Vitamin A* basic

MF15H - *TB - BCG?* medium

MF15I - *Polio vaccine?* medium

MF15J - *Hepatitis B?* medium

MF15K - *Measles vaccine?* medium

MF15L - *DPT?* medium

MF15M - *Antimalarial drug?* medium

MF15N - *ORS?* basic

MF15O - *Anti-Rabies drug?* medium

MF15P - *Adrenaline?* advanced

MF15Q - *Oxytocin?* advanced

Medical Equipment availability

MF16A - *Sthetoscope?* basic

MF16B - *Sterlization?* basic medium

MF16C - *Weighing Scale?(Adult)* basic

MF16D - *Weighing Scale(infant)* basic

MF16E - *Thermometer* basic

MF16F - *Vaginal Speculum* medium

MF16G - *Sonograph/Ultrasound* advanced

MF16H - *X-Ray* advanced

MF16I - *BP Gauge* basic

MF16J - *Oxygen* medium

MF16K - *Otoscope(ear exam)* advanced

MF16L - *Ophthalmoscope* advanced

MF16M - *Delivery kit* medium

MF16N - *Forceps* basic medium

MF16O - *Partograph(delivery tracking)* medium advanced

MF16P - *IV stand* basic

MF16Q - *Laryngoscope* medium advanced

MF16R - *Catheter* medium

MF16S - *Microscope* medium

MF16T - *Centrifuge* medium

MF16U - *Refrigerator* medium

MF16V - *Cold Chest* medium

MF16W - *ECG* advanced

MF16X - *Ambulance* advanced

MF16Y - *Wheelchair* medium basic

MF16Z - *Stretcher trolley* medium basic

Communication Infrastructure

MF16AA - *Computer*

MF16BB - *Internet*

MF16CC - *Landline Telephone*

MF16DD - *Mobile communication*

Hygiene Observations of the Interviewer

MF31A - *Separate exam room?*

MF31B - *Clean Curtains?*

MF31C - *Clean floor?*

MF31D - *Clean Walls?*

MF31E - *Wash basin?*

43.8% don't have a wash basin, 17.4 % have basin but no water

MF31F - *Exam table room*

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MF38 - *Approach road to hospital*

DS12 - Village Level

Social Indicators

VH1A - *percentage Brahmin*

VH1B - *percentage forward(except Brahmin)*

VH1D - *percentage SC*

VH1E - *percentage ST*

Distance from Important units

VIBB - *Nearest town distance category by range(km)*

VI2BB - *District Headquarter distance category by range(km)*

Village Health Facilities

In this section

VMA = Number of x in the village

VMD : If VMA = 0, Then distance from closest x (kms)

VMA1 - *Number of Health sub-centers?*

VMD1 - *distance from sub-center*

VMA2 - *Number of govt dispensaries*

None = 86.8%

VMD2 - *distance from govt dispensary*

mean = 10.47 median = 7 std.dev = 10.92

VMA3 - *Number of Primary health centers*

None = 85.9%

VMD3 - *Distance from Primary Health Center*

mean = 8 median = 6 SD = 6.67

VMA4 - *Number of Community Health centers*

None = 96.3%

VMD4 - *Distance from Community Health Center*

mean = 14.57 median = 12 mode = 10

VMD5 - *Distance from District hospital(pub/pvt)*

0 indicates district center itself

mean = 45 med = 40 mode = 40 SD = 31.92

VMA7 - *Number of private doctors/pvt clinics(Formal/trained)*

None = 71.4%

VMD7 - *Distance from private doctors/pvt clinics(Formal/Trained)*

Mean = 9.84 median = 7 mode = 3 SD = 10.38

VMA8 - *Number of pvt doctors/pvt clinics(informal/untrained)*

None = 52.1%

VMD8 - *Distance from pvt doctor/pvt clinic(untrained/informal)*

Mean = 8.06 Median 5 Mode = 3 SD = 9.74

VMA9 - *Number of pvt hospitals/nursing homes*

None = 94.4%

VMD9 - *Distance from pvt hospital/nursing home*

Mean = 16.99 Median = 12 Mode = 15 SD = 17.41

VMA10 - *number of private pharmacies/chemists*

None = 69.6%

VMD10 - *distance from pvt pharmacies/chemists*

Mean = 7.9 Median = 6 Mode = 3 SD = 7.17

VMA15 - *Number of Village Health Workers*

None = 56%

VMD15 - *Distance from Village Health worker*

Mean = 13.17 Median = 6 Mode = 3 SD = 65.25

VMA16 - *Number of Multipurpose Health Worker*

None = 66.7%

VMD16 - *Distance from Multipurpose Health Worker*

Mean = 13.16 Median = 6 Mode = 3 SD = 54.87

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VM20A - *Satisfaction from Govt Health facilities(yes/no)*

30% dissastisfied

VM20B - *Satisfaction from Pvt Health facilities(yes/no)*

14.6% dissatisfied

Shows credence aspect