Using ICT to improve health worker performance in Punjab: Opportunities and Alternatives

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INTRODUCTION

Background

- Punjab has a large and dispersed primary public health system
- Citizen access to trained doctors and staff, and subsidized medicines
- There is poor information flow from facilities to district administrations, and districts to the center.
- Absence is a problem around the world.
  In Punjab, it may be worse than the worst state in India.
- ICT has exciting potential to improve information flow, which may be leveraged in beneficial ways

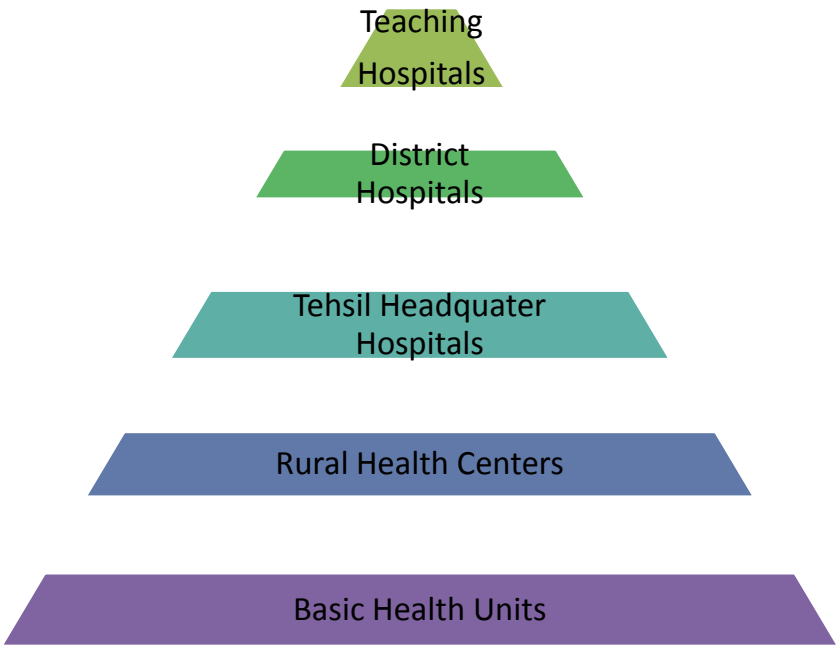
The overall project

- Other papers:
  - Designed, implemented and are doing impact evaluation of a particular technology
  - study determinants of absence from mandated tasks, considering personality and situational differences
- This paper:
  - Describes the institutional context in detail
  - Selected results from a survey of clinics
  - Officials' self-reports about how to improve the system
  - Our own observations and recommendations

Substructures

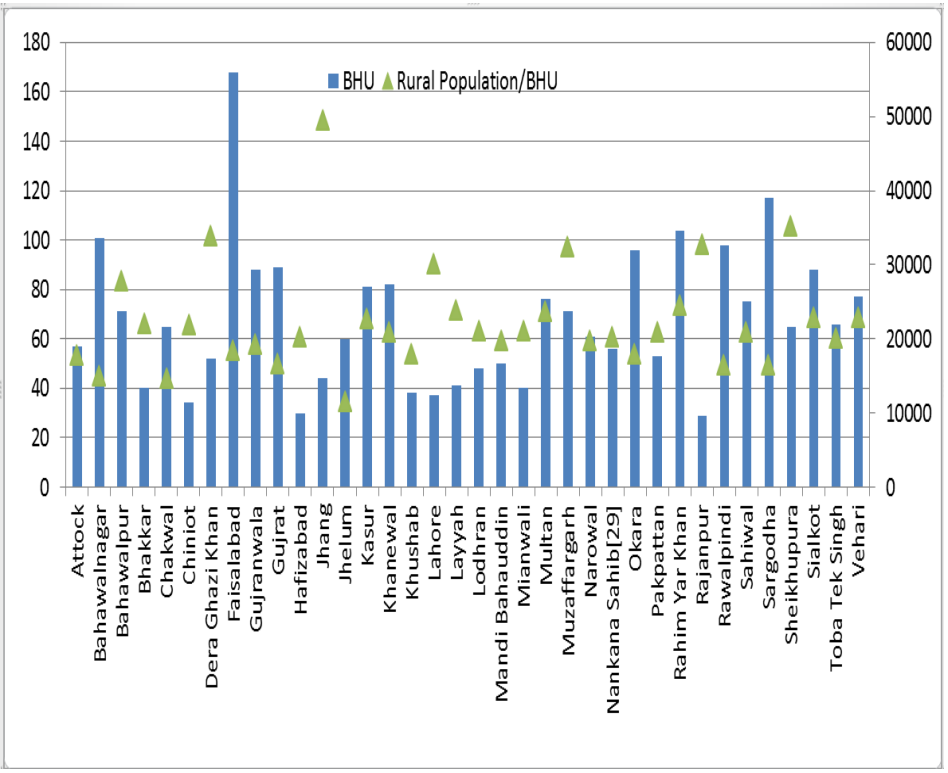
EXISTING ORGANIZATION AND MANAGEMENT OF HEALTH IN THE PUNJAB

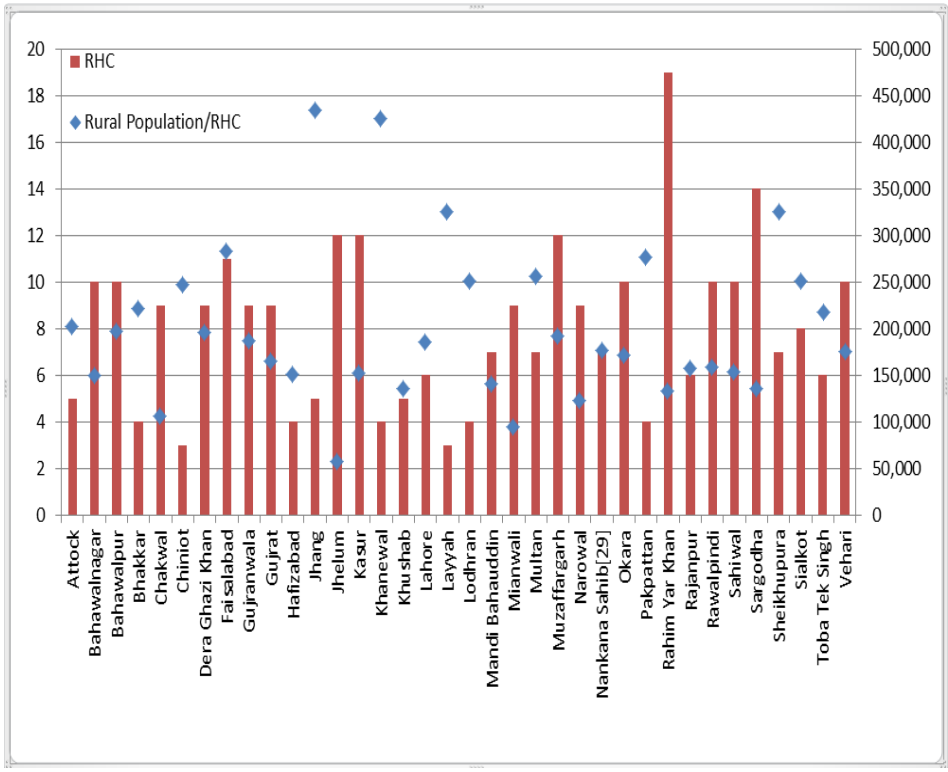
Tiers of Facilities



- 23 Teaching Hospitals at divisional level (11 in Lahore)
- 34 DHQs and 88 THQs are large hospitals at District and Tehsil Centers in urban centers
- 290 RHCs are large clinics with 2-3 doctors, sometimes specialists
- 2496 BHUs serve as first stop clinics for the vast majority of the rural poor.
  - Manned by a doctor, dispenser, Lady Health Visitor (LHV), and Health Technician (HT/MT)
  - Center for roving workers: LHWs, Vaccinators and SHNSs

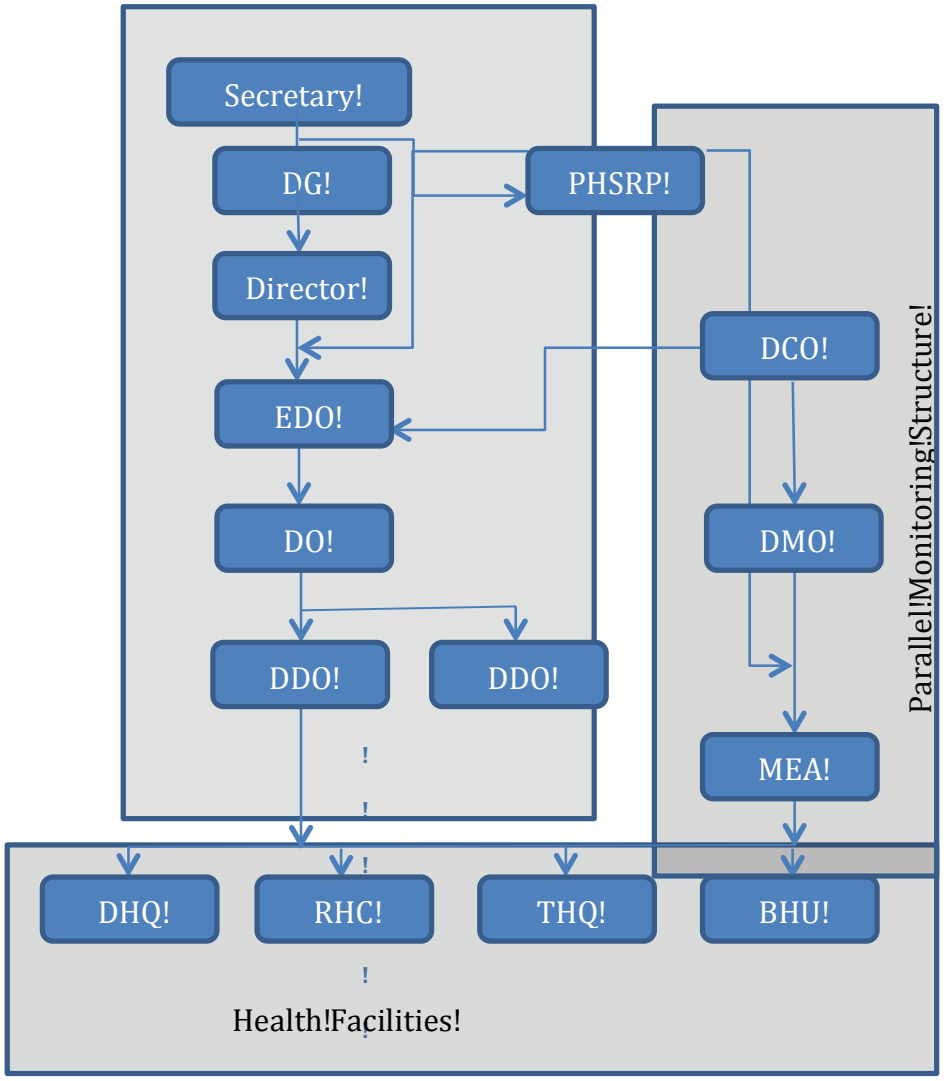
Lesson # 1: Facility placement uneven



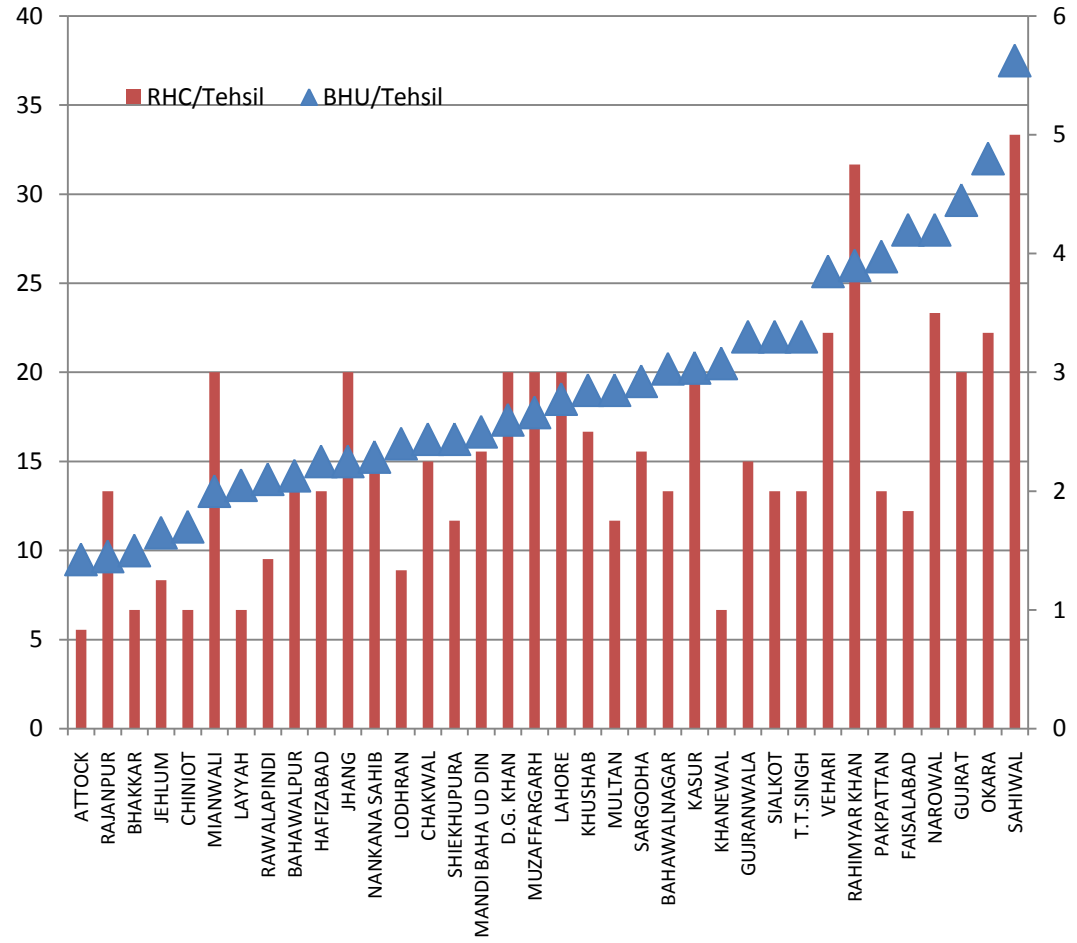


- # of facilities per district is likely an artifact of varying district size
- Rural population per facility is uneven across the province for BHUs and RHCs (compare e.g. Chiniot and Jhang)

Structure of Administration



Lesson # 2: Need to rationalize administrator workloads



- Assuming each BHU is visited at least once a month, and # of visits is the same province-wide, BHUs in Attock are visited 4 times as much as those in Sahiwal.
- RHC workload does not seem to mitigate these differences, nor differences in accessibility

SURVEY: METHODOLOGY AND RESULTS ON ATTENDANCE

Our survey

- ‘Mystery shopping’
  - Unannounced visits
  - Introduced as LUMS surveyors
  - Asked a series of questions
- Representative sample of 850 out of 2496 BHUs
- 3 waves in late 2011 and first half of 2012 (report only first wave here)

Lessons # 3 and 4: Attendance and Postings were weak

- 850 BHUs visited
- 61 closed
- Of open BHUs, 52.4% of essential staff was observed unavailable
  - This may include sanctioned leaves, PRSP districts etc., but this is largely irrelevant for patients

- MOs
  - Seat vacant in 35% of visited BHUs
  - Absent in 269 out of 535 posted cases

Lesson # 5: Inspections were weak

When was the last time the DDO visited this BHU?	Percent
This calendar month	19.31
Last calendar month	32.28
During last six months	23.28
Before six calendar months	11.38
Don't know	13.76

- Only 51.6% of BHUs reported DDO visits in this or the last month, whereas all should.

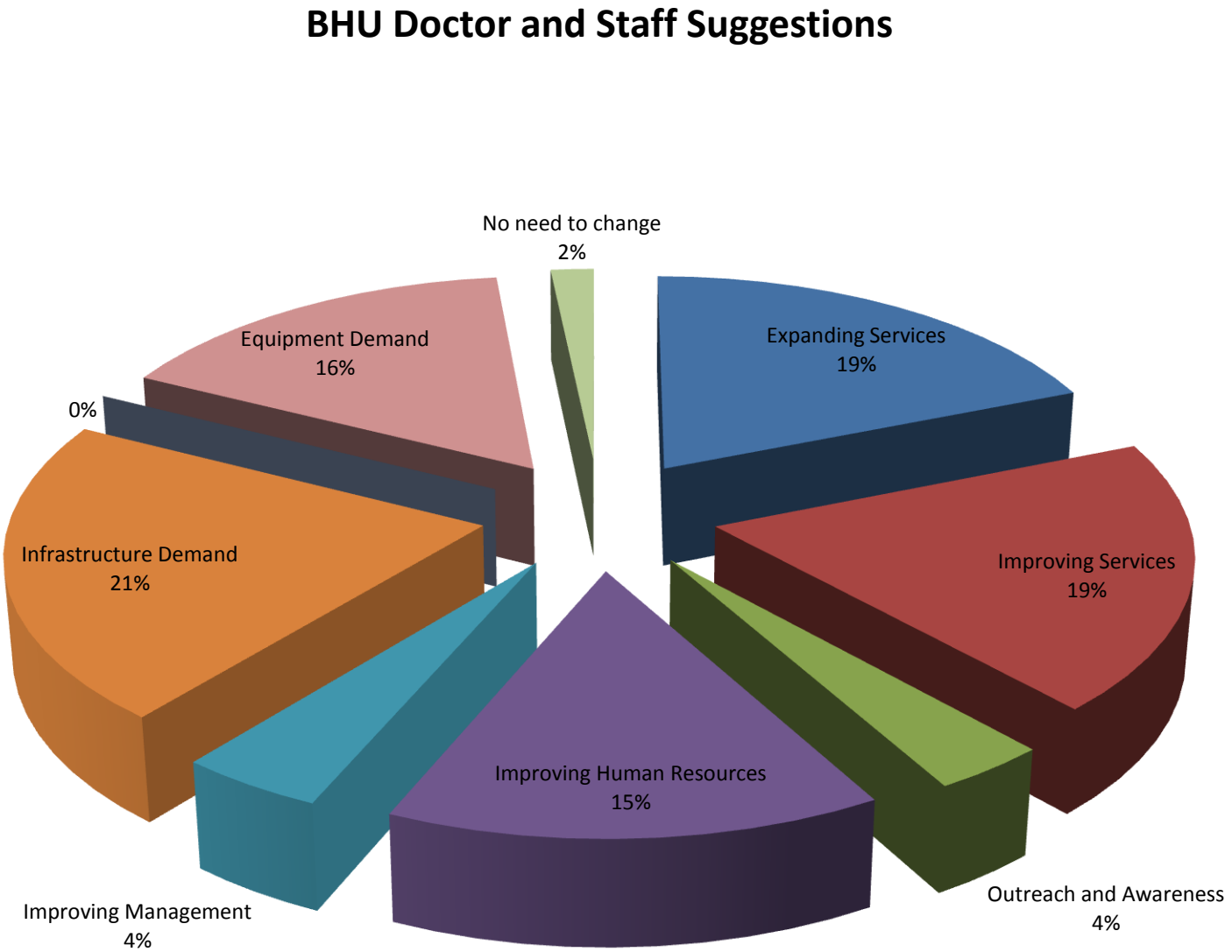
When was the last time the EDO visited this BHU?	Percent
This calendar month	2.77
Last calendar month	25.1
During last six months	25.5
Before six calendar months	17.44
Don't know	29.19

- EDOs must make 15 visits per month. All facility should report visits with the last six months, but only 53.37% do

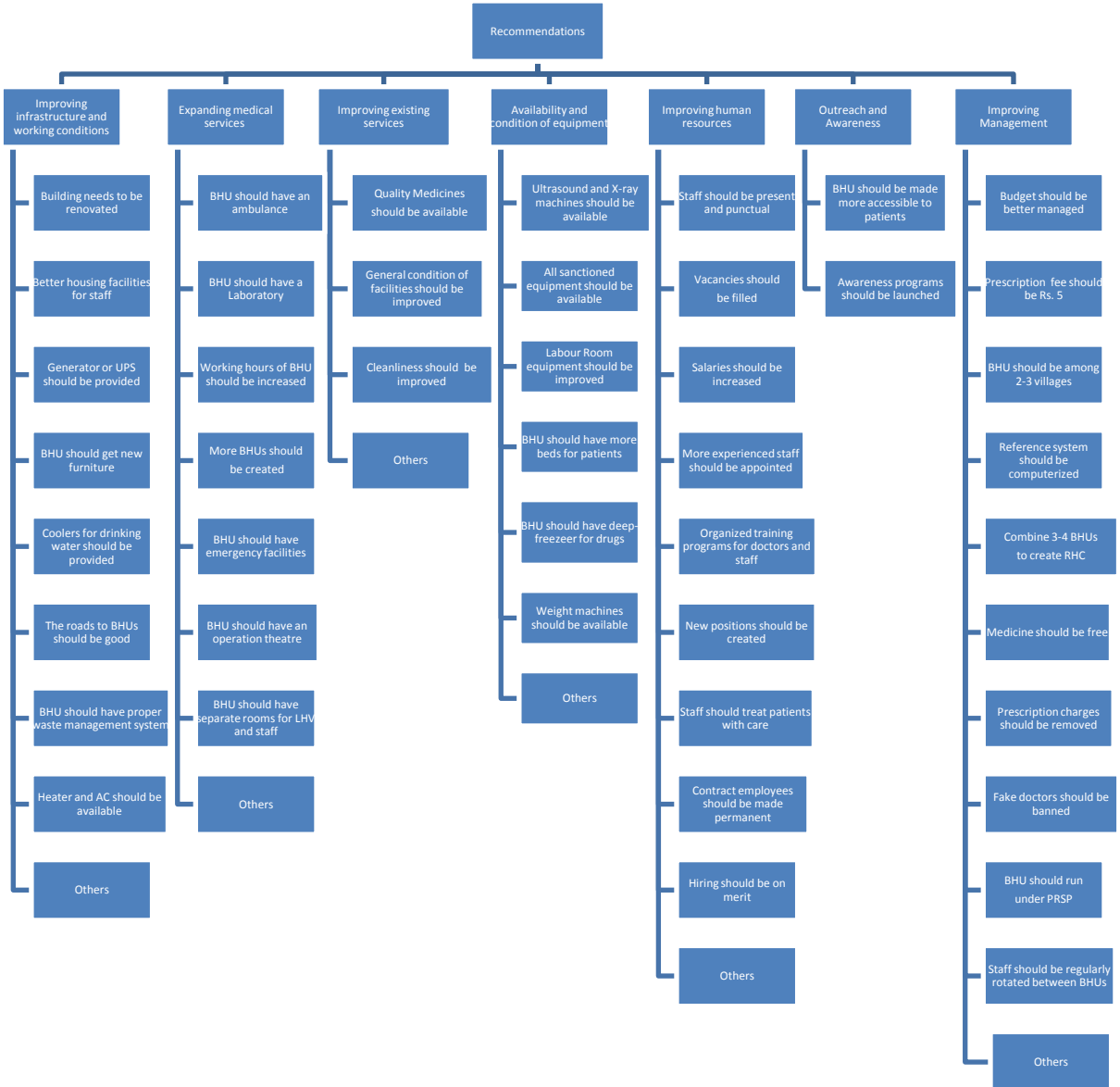
“In your opinion, what are three possible improvements to the BHU?”

SUGGESTIONS FROM THE CLINICS

BHU staff do not report absence to be a problem



Taxonomy of Recommendations



Lesson #6: Availability of quality medicines is the single most important issue reported

Recommendation	Frequency	Percentage of total
Quality medicines should be available	1224	17.3
Ultrasound and X-ray machine should be available	614	8.70
BHU should have an ambulance	509	7.21
Building needs to be renovated	483	6.85
Staff should be present and punctual	463	6.56
BHU should have a laboratory	441	6.25
Vacancies should be filled	285	4.04

CONCLUSIONS

Problems and Opportunities

Lessons Learned:

- Structural Issues
  - # 1: Facility placement uneven
  - # 2: Need to rationalize administrator workloads
- Supply Issues
  - #4 Postings of Doctors at BHUs, and #6 Availability of Medicines
- Management Issues
  - # 3 : Attendance weak
  - #5: Inspections weak

Reform Directions:

- Improve flow of information from facilities to districts to center
- Fix structural issues
- Prioritize and monitor supply issues
- Engage with officer compliance long-term