

Chapter-II
Human Resources

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Human Resources

For an effective and efficient functioning of a District/Sub-District hospital, adequate number of motivated, empowered, trained and skilled human resource is essential. Human resource planning is a must before investing in other components like infrastructure, drugs, diagnostics, equipment, etc. The number and type of staff in terms of specialists, medical officers, nurses, allied health professionals, administrative and support staff have to be ascertained taking into consideration health facility requirements of the people to which the health institutions cater to. Availability of manpower and related issues have been discussed in the following paragraphs:

2.1 Human resources availability against sanctioned strength

Audit analysed the data of Integrated Human Resources Management System (iHRMS) obtained (31.12.2022) from the Director, Treasuries and Accounts, Punjab. The iHRMS data contains *inter alia* information of sanctioned posts and employees posted thereagainst in Department of Health and Family Welfare (DH&FW) and Department of Medical Education and Research (DMER).

The data contained sanctioned strength and persons-in-position (permanent employees) for all the offices (Headquarters, Medical Colleges, District Hospitals, Community Health Centres, Primary Health Centres, Sub-Centres, etc.) and field staff of the above-mentioned Departments.

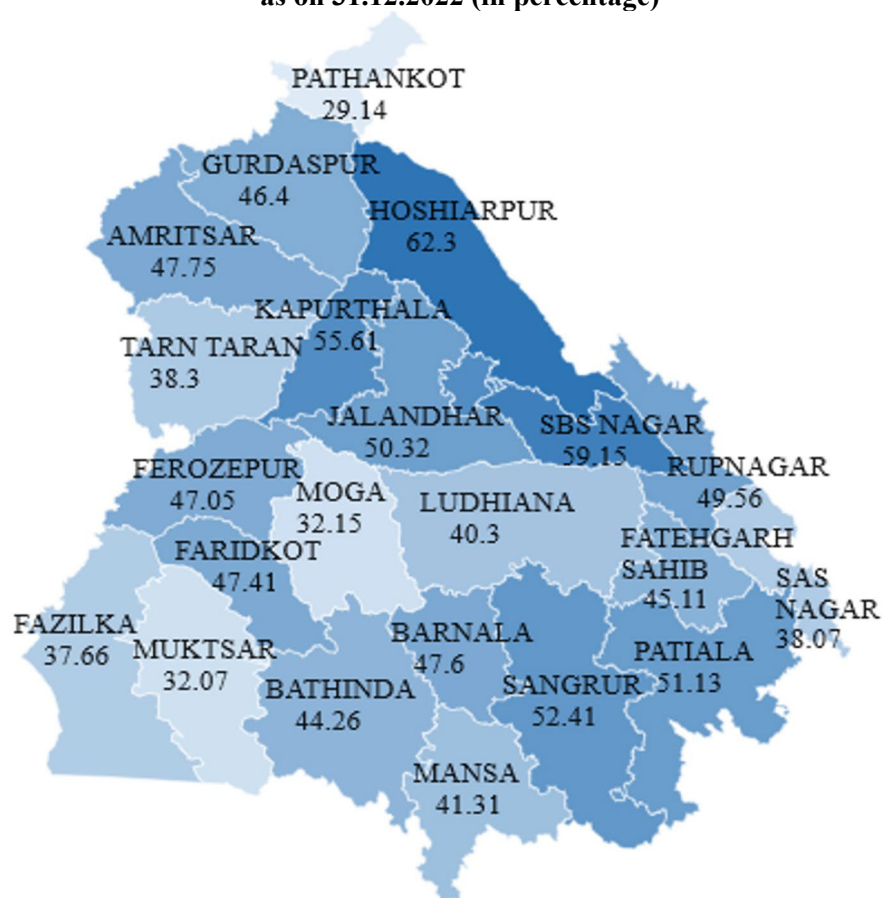
2.2 Availability of manpower

2.2.1 Department of Health and Family Welfare

2.2.1.1 *Geographical skewedness in distribution of available manpower*

It is important for the Government to deploy available manpower uniformly across the State. However, Audit observed from the iHRMS data that the vacant posts in DH&FW were unevenly distributed. The vacancy position varied from as low as 29.14 *per cent* in Pathankot district to 62.30 *per cent* in Hoshiarpur district as shown in **Chart 2.1**.

Chart 2.1: Skewed distribution of manpower across the State under DH&FW as on 31.12.2022 (in percentage)



Source: Analysis of data from iHRMS

Data in respect of District Malerkotla was not depicted in iHRMS data (December 2022). District Malerkotla was carved out of Sangrur district but could not be depicted in the map drawn through MS Excel (Microsoft 365).

Colour code: Darker the colour, higher the vacancy position of manpower

2.2.1.2 Post-wise skewedness in distribution of available manpower

Position of shortage of manpower in different cadres (in percentage) as on 31 December 2022 under DH&FW, GoP is given in Table 2.1.

Table 2.1: Availability of staff in Department of Health and Family Welfare

Category	Sanctioned Post	Working Strength	Vacant Posts	Vacancy Percentage
Doctor	10,702 ¹	5,670 ²	5,032	47.02
Nurse	7,814	4,399	3,415	43.70
Paramedics	22,858	11,984	10,874	47.57
Others	17,424	7,804	9,620	55.21
Total	58,798	29,857*	28,941	49.22

Source: Analysis of data from iHRMS

* Additionally, 849 Doctors; 1,371 Nurses; 4,894 Paramedics; and 1,333 other staff were deployed on contractual basis.

¹ Includes 3,509 sanctioned posts of Ayurveda, Homeopathy and Unani doctors.

² Includes 1,328 posts of Ayurveda, Homeopathy and Unani doctors.

Table 2.1 shows that in DH&FW, 49.22 *per cent* of total sanctioned strength, i.e. 28,941 posts, were vacant in different categories.

Further, DH&FW has 323 different types of posts. Shortages in some of the important posts are shown in **Table 2.2**.

Table 2.2: Shortage in manpower as on 31.12.2022




Sr. No.	Post Name	Sanctioned Post	Working Strength	Vacant Posts	Vacancy Percentage
1.	Medical Officer*	5,688	3,219	2,469	43.41
2.	Medical Officer (Specialist)*	4,991	2,451	2,540	50.89
3.	Staff Nurse [#]	7,415	4,309	3,106	41.89
4.	Nursing Sister [#]	331	86	245	74.02
5.	ANM	3,967	1,788	2,179	54.93
6.	Multi-Purpose Health Worker (Male)	4,037	2,968	1,069	26.48
7.	Multi-Purpose Health Worker (Female)	4,297	2,239	2,058	47.89
8.	Ophthalmic Officer	230	124	106	46.09
9.	Lab Technician	2,259	1,229	1,030	45.60
10.	Pharmacist	2,965	1,765	1,200	40.47
11.	Ward Attendant	3,257	1,279	1,978	60.73
12.	Data Entry Operator	99	44	55	55.56
13.	Clerk	1,072	556	516	48.13
14.	Class IV	1,690	802	888	52.54
15.	Sweeper	2,214	898	1,316	59.44
16.	Operation Theatre Assistant	163	73	90	55.21
17.	Radiographer	542	444	98	18.08
Total		45,217	24,274	20,943	46.32

Source: Analysis of data from iHRMS

* Excluding Senior Residents and Junior Residents.

[#] Excluding Nurses deployed against administrative posts.

Colour Code:

	Green denotes 'least shortage'
	Yellow denotes 'moderate shortage'
	Red denotes 'most shortage'

The above 17 posts in DH&FW contribute to 77 *per cent* of its total workforce. Shortage of manpower in terms of percentage for Medical Officer (Specialist), Nursing Sister, ANM, MPHW (Female), Ward Attendant, Data Entry Operator, Clerk, Class IV, Sweeper and Operation Theatre Assistant was more than the average shortage of important posts in DH&FW i.e. 46.32 *per cent*. Audit noticed that non-availability of manpower in critical posts such as Medical Officer (Specialist), Nurse, ANM, Pharmacist, MPHW,

Lab Technician, Operation Theatre Assistant, Radiographer, etc. impacted provision of essential services in health institutions such as non-operation of equipment/machinery, non-functioning of Operation Theatre services and Intensive Care Unit services and non-operationalisation of HWCs, as discussed subsequently in **Chapters III and V**.

Further, it was also noticed that against the sanctioned posts of 10,392 in categories, like Trained *Dai*³, Computer⁴, Information Assistant, etc. only 166 employees were posted, i.e. 98.4 *per cent* posts were lying vacant. Contrarily, there were posts like Counsellor, Statistical Assistant, Assistant Director, etc. where 5,526 employees were posted against 3,534 sanctioned posts, i.e. 156.37 *per cent* employees were posted.

Moreover, IPHS provide for availability of speciality-wise doctors such as Gynaecologist, Anesthetist, Paediatrician, etc. Shortage of availability of requisite human resources against sanctioned strength led to non-availability of essential OPD, IPD and Emergency Services, as discussed in related Chapters of the Report.

2.2.1.3 Uneven Sanctioned Strength of Doctors at District Level

Punjab has a total of 7,193 sanctioned posts of allopathic doctors under DH&FW, i.e. one Government doctor for 3,857 people. It has been observed that sanctioned posts of doctors have no correlation with population, as shown in **Table 2.3**.

Table 2.3: District-wise population per sanctioned doctor as on 31.12.2022

Sr. No	Name of District	Population of District as per 2011 Census	Sanctioned strength	One doctor sanctioned for population of
1.	Amritsar	24,90,656	516	4,827
2.	Barnala	5,95,527	129	4,616
3.	Bathinda	13,88,525	395	3,515
4.	Faridkot	6,17,508	239	2,584
5.	Fatehgarh Sahib	6,00,163	225	2,667
6.	Fazilka	10,26,200	195	5,263
7.	Ferozepur	10,02,874	167	6,005
8.	Gurdaspur	16,21,725	440	3,686
9.	Hoshiarpur	15,86,625	607	2,614
10.	Jalandhar	21,93,590	477	4,599
11.	Kapurthala	8,15,168	291	2,801




³ Traditional birth attendant.

⁴ Name of a post.

Sr. No	Name of District	Population of District as per 2011 Census	Sanctioned strength	One doctor sanctioned for population of
12.	Ludhiana	34,98,739	568	6,160
13.	Mansa	7,69,751	185	4,161
14.	Moga	9,95,746	135	7,376
15.	Pathankot	6,76,598	121	5,592
16.	Patiala	18,95,686	571	3,320
17.	Rupnagar	6,84,627	288	2,377
18.	Sangrur	16,55,169	445	3,719
19.	SAS Nagar	9,94,628	325	3,060
20.	SBS Nagar	6,12,310	244	2,509
21.	Sri Muktsar Sahib	9,01,896	222	4,063
22.	Tarn Taran	11,19,627	254	4,408
	At Headquarters		154	
Total		2,77,43,338	7,193	3,857

Source: Analysis of data from iHRMS and Statistical Abstract, GoP (2022)

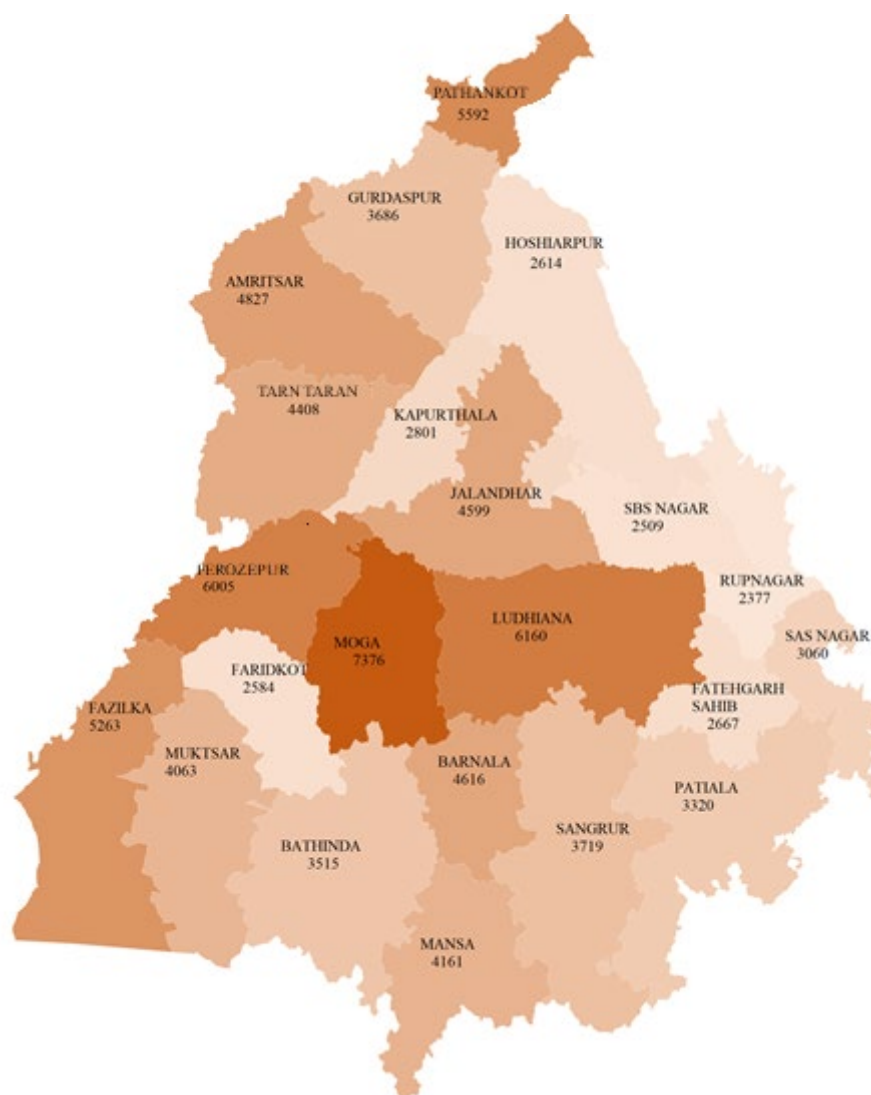
Colour Code:

	Green denotes 'most sanctioned strength of doctors'
	Yellow denotes 'moderate sanctioned strength of doctors'
	Red denotes 'least sanctioned strength of doctors'

As is evident from the above table, one doctor is sanctioned for 2,377 people in Rupnagar district whereas one doctor is sanctioned for 7,376 people in Moga district. In 11 districts⁵, fewer doctors are sanctioned than the State sanctioned average of one doctor for 3,857 people. The adverse impact of unevenness in sanctioned strength was clearly observed in the six test-checked DHs and CHCs in terms of higher Doctor-Patient Ratio (**Paragraphs 3.1.6 and 3.2.5**).

⁵ (i) Amritsar; (ii) Barnala; (iii) Ferozepur; (iv) Jalandhar; (v) Ludhiana; (vi) Mansa; (vii) Moga; (viii) Pathankot; (ix) Muktsar; (x) Tarn Taran; and (xi) Fazilka.

Chart 2.2: District-wise population per sanctioned Doctors as on 31.12.2022



Source: Analysis of data from iHRMS

District Malerkotla was carved out of Sangrur district but could not be depicted in the map drawn through MS Excel (Microsoft 365).

Colour code: Darker the colour, higher the district-wise population per sanctioned doctor

2.2.1.4 Vacancy position of doctors

In DH&FW, doctors have several designations like Medical Officer, Senior Medical Officer, Additional Medical Officer, Dental Surgeon, Senior Dental Surgeon, Deputy Civil Surgeon, Civil Surgeon, etc. Overall, DH&FW has a total of 4,342 public doctors⁶ (Allopathic) available against their total sanctioned strength of 7,193. Thus, 39.64 per cent posts of public doctors (Allopathic) were lying vacant in the State. District-wise position is shown in Table 2.4.




⁶ Besides, 300 doctors were deployed on contractual basis.

Table 2.4: District-wise vacant posts of Doctors as on 31.12.2022

Sr. No.	Name of District	Sanctioned	Available	Shortage	Shortage in per cent
1.	Amritsar	516	320	196	37.98
2.	Barnala	129	102	27	20.93
3.	Bathinda	395	232	163	41.27
4.	Faridkot	239	99	140	58.58
5.	Fatehgarh Sahib	225	159	66	29.33
6.	Fazilka	195	104	91	46.67
7.	Ferozepur	167	118	49	29.34
8.	Gurdaspur	440	256	184	41.82
9.	Hoshiarpur	607	302	305	50.25
10.	Jalandhar	477	339	138	28.93
11.	Kapurthala	291	184	107	36.77
12.	Ludhiana	568	370	198	34.86
13.	Mansa	185	104	81	43.78
14.	Moga	135	85	50	37.04
15.	Pathankot	121	106	15	12.40
16.	Patiala	571	340	231	40.46
17.	Rupnagar	288	155	133	46.18
18.	Sangrur	445	225	220	49.44
19.	SAS Nagar	325	267	58	17.85
20.	SBS Nagar	244	125	119	48.77
21.	Sri Muktsar Sahib	222	98	124	55.86
22.	Tarn Taran	254	160	94	37.01
	At Headquarters	154	92	62	40.26
Total		7,193	4,342	2,851	39.64

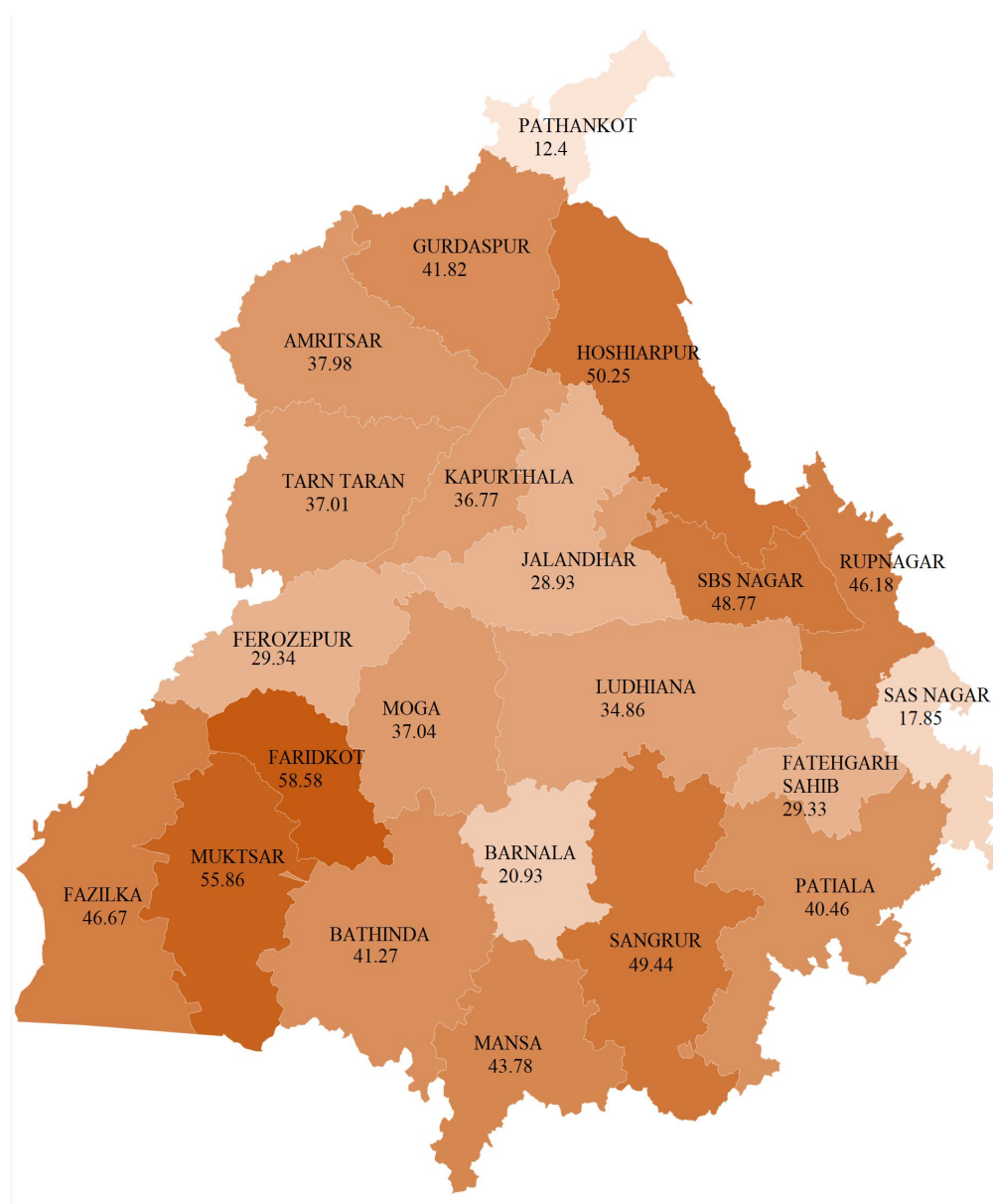
Source: iHRMS data

Colour Code:

	Green denotes 'least shortage'
	Yellow denotes 'moderate shortage'
	Red denotes 'highest shortage'

It was observed that posts of doctors were lying vacant in all the districts. Vacancies at district level ranged from lowest in Pathankot (15) to highest in Hoshiarpur (305). In terms of percentage, 12.40 per cent to 58.58 per cent posts of doctors were lying vacant in the districts of Punjab. This shows a skewed distribution of available doctors across districts in Punjab, as depicted in the following map:

Chart 2.3: District-wise vacant posts of Doctors as on 31.12.2022 (in per cent)



Source: iHRMS data

District Malerkotla was carved out of Sangrur district but could not be depicted in the map drawn through MS Excel (Microsoft 365).

Colour code: Darker the colour, higher the vacancies of doctors (in per cent)

2.2.1.5 Doctor to population ratio in Punjab

As per 2011 census, population of Punjab was 2,77,43,338. World Health Organisation (WHO) recommended one doctor for 1,000 population. Accordingly, the State should have 27,743 doctors. But the State has a total of 58,262 registered doctors (public and private) as of March 2022. So, there is one doctor for 500 people which is double the WHO recommendation.

Further, the State has a total of 4,342 public doctors (Allopathic) available against their total sanctioned strength of 7,193. So, there is one public doctor for 6,390 people in Punjab State. It was found that the availability of public

doctors at district level was not uniform in all the districts, and it varied from as high as one public doctor for 3,725 people in SAS Nagar district to as low as one doctor for 11,715 people in Moga district, as shown in **Table 2.5**.

Table 2.5: District-wise doctors posted for population as on 31.12.2022

Sr. No.	Name of District	Population of District as per 2011 census	Public doctors in the district	One doctor posted for population of
1.	Amritsar	24,90,656	320	7,783
2.	Barnala	5,95,527	102	5,839
3.	Bathinda	13,88,525	232	5,985
4.	Faridkot	6,17,508	99	6,237
5.	Fatehgarh sahib	6,00,163	159	3,775
6.	Fazilka	10,26,200	104	9,867
7.	Ferozepur	10,02,874	118	8,499
8.	Gurdaspur	16,21,725	256	6,335
9.	Hoshiarpur	15,86,625	302	5,254
10.	Jalandhar	21,93,590	339	6,471
11.	Kapurthala	8,15,168	184	4,430
12.	Ludhiana	34,98,739	370	9,456
13.	Mansa	7,69,751	104	7,401
14.	Moga	9,95,746	85	11,715
15.	Pathankot	6,76,598	106	6,383
16.	Patiala	18,95,686	340	5,576
17.	Rupnagar	6,84,627	155	4,417
18.	Sangrur	16,55,169	225	7,356
19.	SAS Nagar	9,94,628	267	3,725
20.	SBS Nagar	6,12,310	125	4,898
21.	Sri Muktsar Sahib	9,01,896	98	9,203
22.	Tarn Taran	11,19,627	160	6,998
	At Headquarters		92	0
Total		2,77,43,338	4,342	6,390

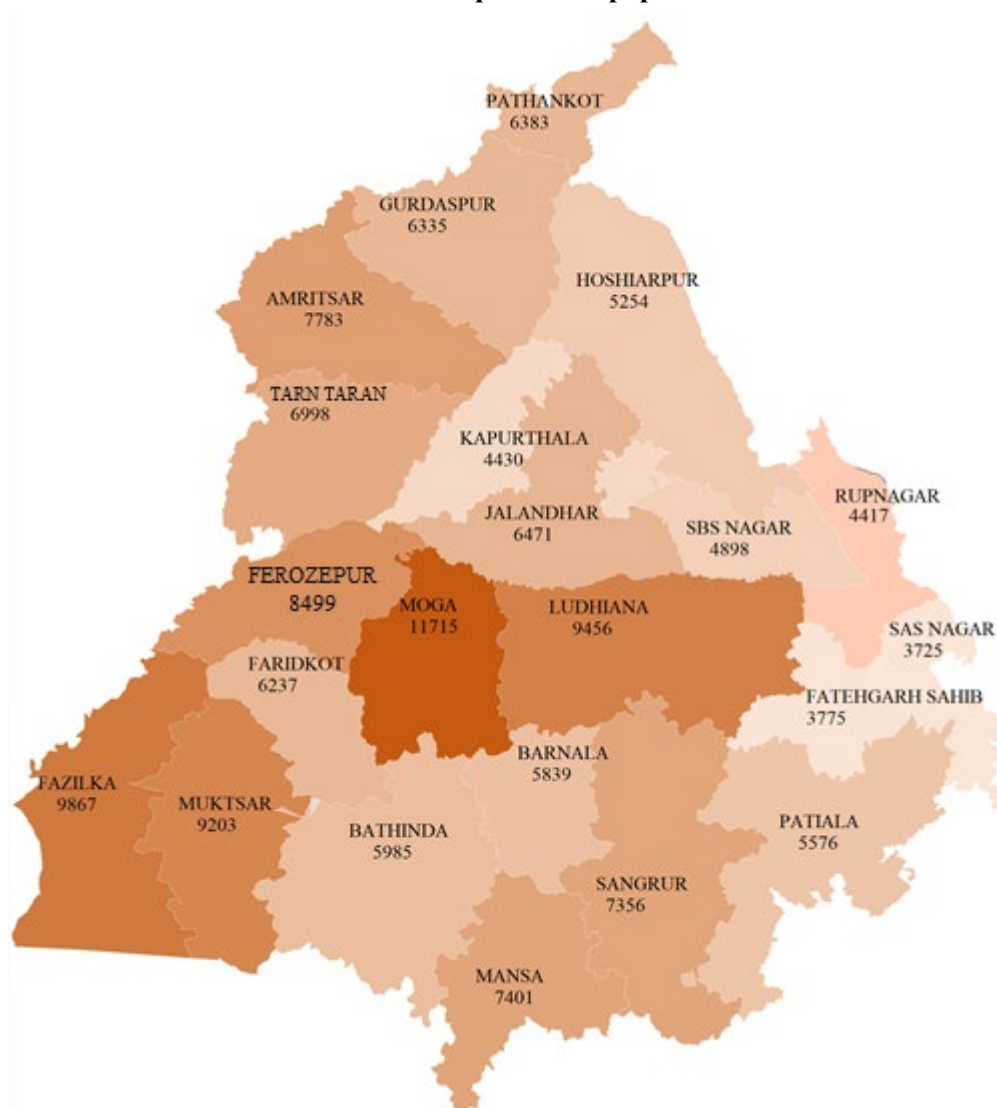
Source: iHRMS data

Colour Code:

	Green denotes 'least doctor to population ratio'
	Yellow denotes 'moderate doctor to population ratio'
	Red denotes 'highest doctor to population ratio'

The above table clearly shows that the availability of doctors is uneven in the districts of Punjab. Higher doctor to population ratio would over-burden the doctors and reduce consultation time available to the patients, as discussed in **Chapter 3 (Appendix 3.1)**.

Chart 2.4: District-wise doctors posted for population as on 31.12.2022



Source: iHRMS data

District Malerkotla was carved out of Sangrur district but could not be depicted in the map drawn through MS Excel (Microsoft 365).

Colour Code: Darker the colour higher the doctor to population ratio

2.2.1.6 Availability of Staff Nurse and ANM

The skewedness in availability of manpower across districts becomes even more prominent when Audit analysed the vacancy position against particular posts in iHRMS. For instance:

- (i) Availability of staff nurse against the sanctioned strength varied widely. It was excess by 17.60 per cent in Moga district while there was a shortage of 56.76 per cent in Mansa district.
- (ii) Shortage of ANM against the sanctioned strength varied from 19.23 per cent in Moga District to 97.19 per cent in Amritsar District. However, in Fazilka district, 40 per cent ANM were posted in excess.

Thus, the shortages in availability of staff need to be catered to either through recruitment or through rationalisation of postings.

The reply of the State Government was awaited (February 2024).

2.2.2 Department of Medical Education and Research (DMER)

DMER has sanctioned strength of 10,151 posts which includes sanctioned strength of four medical colleges. There was 59.19 *per cent* vacancy in DMER as on 31.12.2022, as detailed in **Table 2.6**.

Table 2.6: Manpower position under DMER

Category	Sanctioned Posts	Working Strength	Vacant Posts	Percentage of vacant posts
Professor/Associate Professor/Assistant Professor	932	451	481	51.61
Medical Officer/Senior Resident/Junior Resident	960	246	714	74.38
Staff Nurse	3,507	1,500	2,007	57.23
Paramedics	856	312	544	63.55
Others	3,896	1,634	2,262	58.06
Total	10,151	4,143*	6,008	59.19

Source: Analysis of data from iHRMS

* Additionally, 16 Professors/Associate Professors; 21 Staff Nurses; and 92 Paramedics were deployed on contractual basis.



As shown in the table above, 51.61 *per cent* posts of Professor/Associate Professor/Assistant Professor, 74.38 *per cent* posts of Medical Officer/Senior Resident/ Junior Resident, 57.23 *per cent* posts of Staff Nurses, 63.55 *per cent* posts of paramedical staff and 58.06 *per cent* posts of other staff are vacant in DMER. Shortage of manpower for some of the specific posts is shown in **Table 2.7**.

Table 2.7: Category-wise position of manpower under DMER as on 31.12.2022

Name of the post	Sanctioned Post	Working Strength	Vacant Posts	Percentage of vacant posts
Professor	218	106	112	51.38
Associate Professor	304	110	194	63.82
Assistant Professor	410	235	175	42.68
Medical Officer	195	125	70	35.90
Senior Resident	466	71	395	84.76
Junior Resident	299	50	249	83.28
Staff Nurse	3,507	1,500	2,007	57.23
Demonstrator	22	7	15	68.18
Clerk	200	82	118	59.00
Nursing Sister	120	37	83	69.17
Pharmacist	124	38	86	69.35
Lab Technician	103	9	94	91.26

Source: Analysis of data from iHRMS

Colour Code:

 Yellow denotes 'moderate shortage'
 Red denotes 'most shortage'

As seen from the above:

- i. 51.38 *per cent* vacancies of Professor, 63.82 *per cent* vacancies of Associate Professor and 42.68 *per cent* vacancies of Assistant Professor were lying vacant in different medical colleges under DMER;
- ii. 35.90 *per cent* vacancies of Medical Officer, 84.76 *per cent* vacancies of Senior Resident and 83.28 *per cent* vacancies of Junior Resident were lying vacant in different medical colleges under DMER;
- iii. 57.23 *per cent* vacancies of Staff Nurse, 69.17 *per cent* vacancies of Nursing Sister, 91.26 *per cent* of Lab Technician and 69.35 *per cent* of Pharmacist were lying vacant in different medical colleges under DMER; and
- iv. 59.00 *per cent* vacancies of Clerk and 68.18 *per cent per cent* vacancies of Demonstrator were lying vacant in different medical colleges under DMER.

The reply of the State Government was awaited (February 2024).

2.3 Shortage of technicians and drivers for ambulance

As per IPHS 2012 norms, a set of three persons i.e. two technicians and one driver, should be available with each ambulance.

Audit noticed that:

- No technician was deployed with ambulances available in the test-checked DHs, CHCs and PHCs, except for DH Moga;
- Only two technicians were deployed against the requirement of eight in four ambulances available in DH Moga;
- Short availability of drivers for ambulance was noticed in DH Gurdaspur (one) and DH Ludhiana (two) whereas excess number of drivers were deployed in DH Hoshiarpur (one) and DH Moga (two).

Non-availability of adequate number of human resources for ambulance services adversely affects the timely and qualitative referral of patients to higher healthcare institutions, as discussed in **Paragraph 3.6.3**.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

2.4 Availability of Accredited Social Health Activists (ASHA)

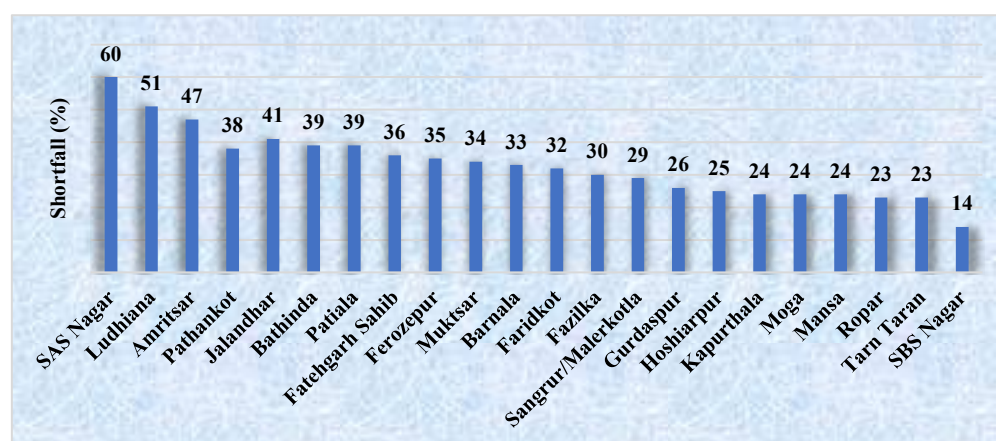
One of the key components of the National Rural Health Mission is to provide every village in the country with a trained female community health activist, Accredited Social Health Activist (ASHA). Her roles and responsibilities in the society are to create awareness and to provide information to the community on determinants of health such as nutrition, basic sanitation and hygienic practices, healthy living and working conditions, information on existing health services and the need for timely utilisation of health and family welfare services. She will also counsel women on birth preparedness, importance of safe delivery, breastfeeding and complementary feeding,

immunisation, contraception, and prevention of common infections including Reproductive Tract Infection/Sexually Transmitted Infection (RTI/STI) and care of the young child. As per role and responsibilities, ASHAs will facilitate in Ante-Natal Check-up (ANC), Post-Natal Check-up (PNC), escort/accompany pregnant women and children requiring treatment/admission to the nearest PHC/CHC/FRU. Further, they will also act as a depot holder for essential provisions being made available to every habitation like Oral Rehydration Therapy, Iron Folic Acid Tablet (IFA), Chloroquine, Disposable Delivery Kits, Oral Pills, Condoms, etc., as detailed in **Paragraph 3.5.1**.

As per guidelines issued on ASHA by the Central Government, one ASHA is required per thousand population. As per estimated population (3,15,97,883) of Punjab in 2021 (published in Statistical Abstract of Punjab 2023 by the Directorate of Statistics, Department of Planning, Punjab), there is a requirement of 31,598 ASHAs against which there was availability of 20,139 (shortfall of 36.26 *per cent*) ASHAs in the State of Punjab.

District-wise shortfall (in *percentage*) in availability of ASHAs as of March 2022 is depicted in **Chart 2.5**.

Chart 2.5: Shortfall (in *per cent*) in availability of ASHA



Source: Information regarding availability of ASHAs furnished by State Health Society Punjab and shortage calculated as per estimated population of Punjab

From the above, it is evident that the availability of ASHAs in all districts was uneven. The shortage of ASHAs ranged between 14 *per cent* in district SBS Nagar and 60 *per cent* in district SAS Nagar.

As per NFHS-5 (2019-21), mothers who had at least four antenatal care visits were 59.3 *per cent* in Punjab. Mothers who consumed iron folic acid for 180 days or more when they were pregnant were 40.5 *per cent*, as discussed in **Paragraph 3.5.1**. ASHAs facilitate delivery of health services and also create awareness and popularise health services and family planning methods. Health indicators especially related to child and maternal health could have also been improved.

On being pointed out in audit, the Department admitted (December 2022) the facts in the exit conference.

2.5 Management of human resources in DHs, CHCs, PHCs and Medical Colleges

2.5.1 District Hospitals

2.5.1.1 Availability of human resources in District Hospitals

Availability of staff (regular) against the sanctioned posts in each District Hospital is depicted in **Table 2.8**.

Table 2.8: Availability of Staff for various posts in each DH as of March 2023

Name of DH	Specialists/Doctors				Nurses				R	Paramedics*			Other Staff		
	R	S	P	V/E (in per cent)	R	S	P	V/E (in per cent)		R	S	P	V/E (in per cent)	S	P
Amritsar	34	58	42	28	90	96	93	3	31	27	24	11	29	44	+52
Barnala	34	41	27	34	90	68	43	37	31	30	25	17	93	67	28
Bathinda	34	59	52	12	90	94	82	13	31	37	52	+41	114	106	7
Faridkot	29	43	43	0	45	54	49	9	22	24	24	0	21	21	0
Fatehgarh Sahib	29	47	34	28	45	49	39	20	22	31	30	3	0	0	0
Fazilka	29	35	22	37	45	27	22	19	22	28	21	25	66	52	21
Ferozepur	34	46	37	20	90	67	62	7	31	31	28	10	114	97	15
Gurdaspur	34	38	46	+21	90	77	59	23	31	26	24	8	4	2	50
Hoshiarpur	34	57	55	4	90	80	57	29	31	44	38	14	3	1	67
Jalandhar	68	75	45	40	225	188	101	46	72	44	35	20	5	3	40
Kapurthala	34	45	29	36	90	61	39	36	31	28	19	32	61	26	57
Ludhiana	50	56	44	21	135	78	66	15	47	47	30	36	87	56	36
Malerkotla	34	25	15	40	90	37	21	43	31	22	15	32	68	45	34
Mansa	29	38	29	24	45	51	30	41	22	13	19	+46	3	2	33
Moga	34	46	28	39	90	54	53	2	31	18	26	+44	68	82	+21
Pathankot	34	63	51	19	90	75	57	24	31	33	29	12	67	66	1
Patiala	50	72	50	31	135	69	61	12	47	31	32	+3	60	59	2
Rupnagar	34	47	28	40	90	62	61	2	31	45	34	24	114	59	48
Sangrur	50	31	29	6	135	52	44	15	47	17	14	18	3	2	33
SAS Nagar	50	58	48	17	135	65	64	2	47	30	23	23	70	50	29
SBS Nagar	29	45	26	42	45	47	41	13	22	22	21	5	67	28	58
Sri Muktsar Sahib	29	42	19	55	45	58	30	48	22	42	34	19	54	46	15
Tarn Taran	34	41	32	22	90	59	63	+7	31	35	57	+63	48	59	+23
Total	850	1,108	831	25	2,115	1,568	1,237	21	764	705	654	7	1,219	973	20
Shortage against IPHS 2012 norms				2				42				14			

Source: DH&FW, Punjab

R = Required as per IPHS 2012 norms; S = Sanctioned post; P = In position; V = Vacant post; and E = Excess (+)

* Posts of Storekeeper, EEG Technician, OT Technician, CSSD Assistant, Dermatology Technician, Dental Technician and Rehabilitation Therapist as per IPHS norms were not available on the sanctioned strength of DHs. Further, details of sanctioned strength as well as persons-in-position for the posts of ANM (S-63, P-58) and Laboratory Attendant (S-25, P-18) are not included in paramedical staff as these two posts are not defined under IPHS norms 2012.

Note: Requirement of manpower in respect of other staff could not be compared, as posts related to these categories under IPHS and sanctioned posts differed.

Colour code:

	Dark green colour denotes 'excess manpower'
	Light green colour denotes 'least shortage' (<=20%)
	Yellow colour denotes 'moderate shortage' (<=40%)
	Red colour denotes 'most shortage' (> 40%)

From the above Table, it can be seen that in district hospitals, shortages of staff in different categories were noticed not only against IPHS 2012 norms but also against the posts sanctioned by the Department itself. In case of specialist doctors/medical officers, 831 were available against 850 posts required under IPHS norms and 1,108 sanctioned posts. Similarly, in case of staff nurses, only 1,237 staff nurses were available against 2,115 posts required under IPHS norms and 1,568 sanctioned posts. Against 705 sanctioned posts and 764 posts under IPHS norms of paramedical staff, only 654 (excluding ANMs and Laboratory Attendants) paramedics were available. As many as 1,219 sanctioned posts of other staff, 973 were available. Thus, there was overall shortage of 2 per cent against IPHS norms and 25 per cent against sanctioned posts in specialists/doctors, 42 per cent against IPHS norms and 21 per cent against sanctioned posts in staff nurses, 14 per cent against IPHS norms and 7 per cent against sanctioned posts in paramedical and 20 per cent in other staff against sanctioned posts.

2.5.1.2 District-wise availability of Specialists

District-wise details of availability of Specialists in DHs as on 31.03.2023 is given in Table 2.9.

Table 2.9: District-wise availability of Specialists in DHs

Name of DH	Specialist				
	Required as per IPHS norms 2012	Total Sanctioned posts	Total in position	Shortage/excess in percentage as per IPHS norms 2012	Shortage/excess in percentage as per sanctioned posts
Sri Muktsar Sahib	17	25	11	35	56
Jalandhar	43	51	31	28	39
Malerkotla	20	14	9	55	36
Rupnagar	20	30	21	+5	30
SBS Nagar	17	30	21	+24	30
Amritsar	20	46	33	+65	28
Patiala	34	53	38	+12	28
Moga	20	33	24	+20	27
Barnala	20	29	23	+15	21
Fatehgarh Sahib	17	33	26	+53	21
Mansa	17	28	22	+29	21
Fazilka	17	20	16	6	20
Kapurthala	20	27	22	+10	19
Ferozepur	20	31	26	+30	16
Pathankot	20	39	35	+75	10
Ludhiana	34	33	31	9	6
Sangrur	34	24	23	32	4
SAS Nagar	34	41	41	+21	0
Tarn Taran	20	23	23	+15	0
Bathinda	20	36	39	+95	+8
Faridkot	17	29	32	+88	+10
Hoshiarpur	20	36	40	+100	+11
Gurdaspur	20	22	32	+60	+45
Total	521	733	619	+19	16

Source: DH&FW Punjab

Colour code: Red depicts 'most shortage', Yellow depicts 'moderate', Light Green depicts 'least/no shortage' and Dark Green depicts 'excess'

It is evident from the above table that the maximum shortage was found in DHs at Sri Muktsar Sahib, Jalandhar and Malerkotla i.e. 56 per cent, 39 per cent and 36 per cent against the sanctioned posts and was 35 per cent, 28 per cent, 55 per cent and 32 per cent in DHs at Sri Muktsar Sahib, Jalandhar, Malerkotla and Sangrur respectively against the IPHS norms. However, excess Specialists were found posted in DHs at Gurdaspur, Hoshiarpur, Faridkot and Bathinda against the sanctioned posts and in all DHs except at Sri Muktsar Sahib, Jalandhar, Malerkotla, Sangrur, Fazilka and Ludhiana as per IPHS norms.

2.5.1.3 Speciality/department-wise availability of Specialists

Specialist-wise posts were sanctioned in DH&FW and availability of specialty-wise doctors such as Gynaecologists, Anaesthetists, Paediatricians, etc. in different specialties as on 31.03.2023 is given in **Table 2.10**.

Table 2.10: Availability of Specialists in DHs (Specialty wise)

Name of Specialty	Required as per IPHS norms	Required as per sanctioned posts	Available	Shortage/ Excess (+) (In per cent) as per IPHS norms	Shortage/ Excess (+) (In per cent) as per sanctioned posts
Radiologist	28	26	11	61	58
Forensic Specialist	5	16	7	+40	56
Paediatrician	69	112	70	+1	38
Obstetrician/Gynaecologist (O&G specialist)	70	78	55	21	29
Medical Specialist	53	50	36	32	28
Anesthetist (Regular/ Trained)	52	111	83	+60	25
Dermatologist/Venereologist	5	29	24	+380	17
Psychiatrist	23	39	33	+43	15
Surgery Specialists	52	55	49	6	11
Microbiologist	5	38	35	+600	8
Chief Medical Superintendent/Hospital Superintendent	0	21	20	0	5
Dental Surgeon	29	31	34	+17	+10
Orthopaedician	28	42	47	+68	+12
Pathologist and Blood Bank In-charge	46	35	44	4	+26
ENT Surgeon	28	25	34	+21	+36
Ophthalmologist	28	25	37	+32	+48
Total	521	733	619	+19	16

Source: Information furnished by DH&FW Punjab

Colour code:

	Red depicts 'most shortage'
	Yellow depicts 'moderate shortage'
	Light Green depicts 'least/no shortage'
	Dark Green depicts 'excess'

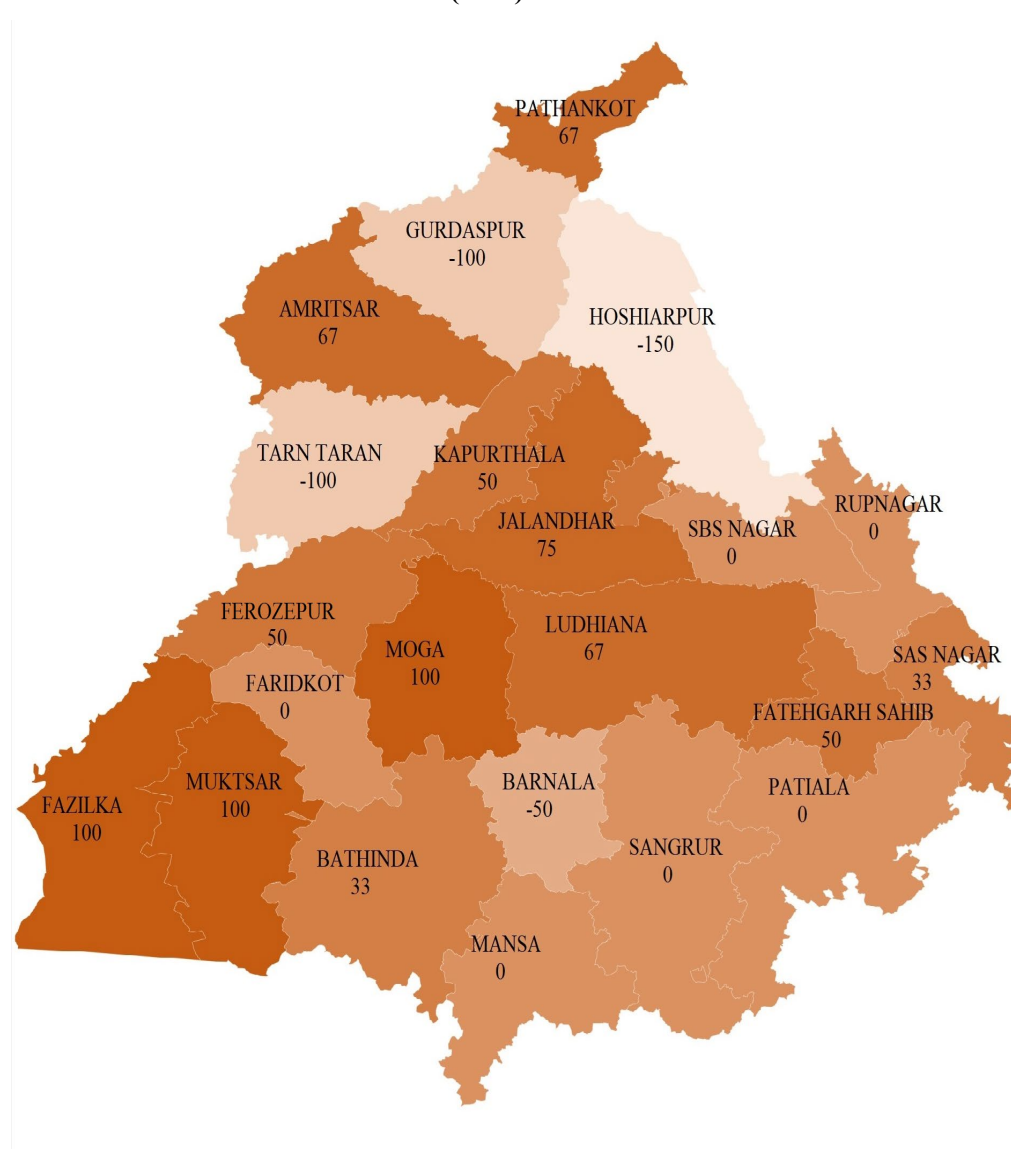
In terms of IPHS 2012 norms, there was a shortage of critical specialists such as Radiologist, Obstetrician/Gynaecologist, and Medical Specialists, whereas against the sanctioned posts, critical specialists such as Radiologist, Forensic Specialist, Paediatrician, Obstetrician/Gynaecologist, Medical Specialists, etc. were also found short in DHs. However, some specialists in Anaesthesia, Dermatology/Venereology, Psychiatry, Microbiology, ENT and Orthopaedics as per IPHS norms and some specialists in Ophthalmology, ENT, Pathology, Orthopaedics and Dentistry as per sanctioned posts were found posted in excess. Reasons for posting of excess staff were not furnished to Audit.

The details of non-posting or disproportionate posting of human resources in DHs is depicted in *Appendix 2.1*. Specialist-wise analysis is as under:

(i) Specialist Doctors/Medical Officers

- **Medical Specialist:** In three DHs (Fazilka, Moga and Sri Muktsar Sahib), no Medical Specialist was posted against the six sanctioned posts, in another three DHs (Amritsar, Ludhiana and Pathankot), only three Medical Specialists were posted against the nine sanctioned posts and on the other hand, in four DHs, (Barnala, Gurdaspur, Hoshiarpur and Tarn Taran) against six sanctioned posts of medical specialists, 12 were posted i.e. 100 *per cent* in excess.

Chart 2.6: Excess/Shortage (in per cent) of Medicine Speciality (DHs) as on 31.03.2023



Source: DH&FW data

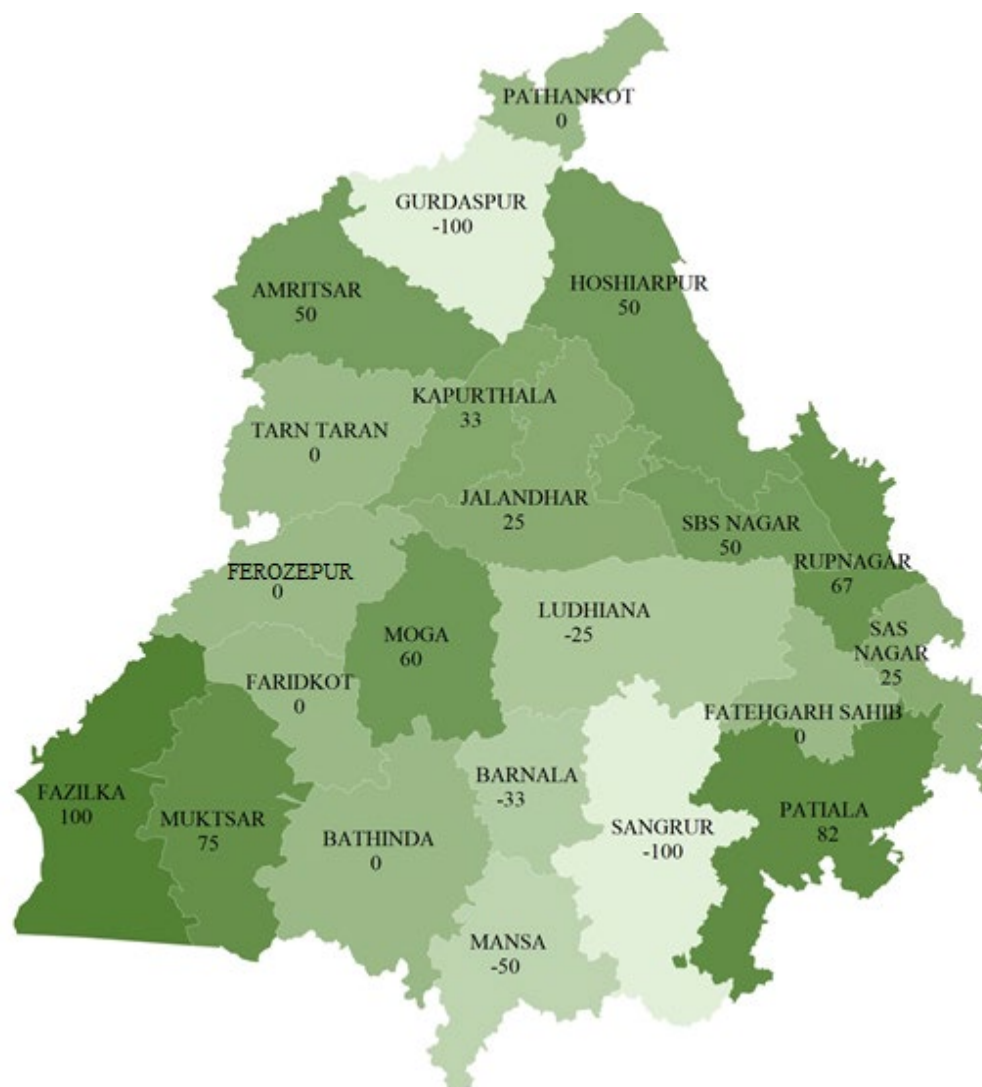
District Malerkotla was carved out of Sangrur district but could not be depicted in the map drawn through MS Excel (Microsoft 365).

Colour Code: Darker the colour, higher the shortage of Medicine Specialty (DH)

- **Surgery Specialist:** In DHs at Malerkotla and Sri Muktsar Sahib, no surgeon was posted against three sanctioned posts, only one surgeon was posted in DH Amritsar against five posts whereas in five DHs (Hoshiarpur, Gurdaspur, Rupnagar, Sangrur and Tarn Taran), against seven sanctioned posts, 13 Surgery specialists were posted.
- **Obstetrician/Gynaecologist Specialist:** No Gynaecologist was posted in DH Fazilka against sanctioned post; in three DHs (Patiala, Rupnagar and Sri Muktsar Sahib), only five Gynaecologists were posted against 24 sanctioned posts. On the other hand, in five DHs (Barnala, Gurdaspur,

Mansa, Sangrur and Ludhiana), 20 Obstetrician/Gynaecologists were posted against 13 sanctioned posts.

Chart 2.7: Excess/Shortage (in per cent) of Specialists in Obstetrics & Gynaecology Speciality (DHs) as on 31.03.2023



Source: DH&FW data

District Malerkotla was carved out of Sangrur district but could not be depicted in the map drawn through MS Excel (Microsoft 365).

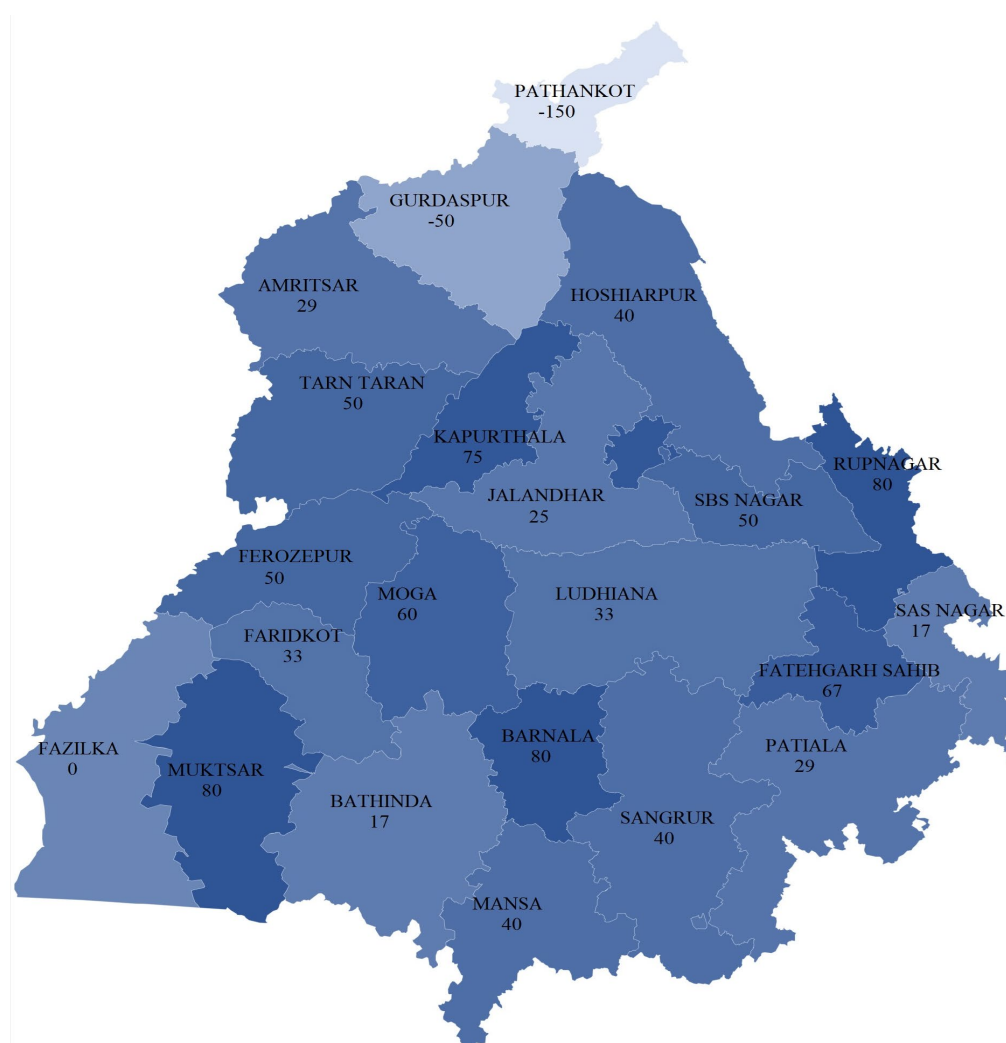
Colour Code: Darker the colour, higher the shortage of Specialists in Obstetrics & Gynaecology Specialty (DHs)

- **Psychiatrist:** No Psychiatrist was posted against four sanctioned posts in DHs at Amritsar, Malerkotla and Rupnagar; in six⁷ DHs, significant shortage of Psychiatrists was there, whereas in four DHs (Bathinda, Fazilka, Faridkot and Pathankot), nine psychiatrists were posted against the five sanctioned posts.

⁷ DHs at (i) Fatehgarh Sahib; (ii) Hoshiarpur; (iii) Mansa; (iv) Moga; (v) SAS Nagar; and (vi) SBS Nagar.

- **Dermatologist/Venereologist:** In DH Jalandhar, only one Dermatologist/Venereologist was posted against four sanctioned posts whereas in Mata Kaushalya Hospital (MKH) DH Patiala, two Dermatologist/Venereologists were posted against one sanctioned post. Moreover, in three DHs (Bathinda, Hoshiarpur and Jalandhar), only three Dermatologists/Venereologists were posted against eight sanctioned posts.
- **Paediatrician:** Shortage of Paediatrician was seen in 19 DHs whereas in two DHs (Gurdaspur and Pathankot), 11 Paediatrician were posted against six sanctioned posts. In five DHs (Barnala, Fatehgarh Sahib, Kapurthala, Rupnagar and Sri Muktsar Sahib), significant shortage was seen wherein six Paediatricians were posted against 25 sanctioned posts. No shortage was seen in DHs at Malerkotla and Fazilka;

Chart 2.8: Excess/shortage (in per cent) of Specialists in Paediatrics Speciality (DHs) as on 31.03.2023



Source: DH&FW data

District Malerkotla was carved out of Sangrur district but could not be depicted in the map drawn through MS Excel (Microsoft 365).

Colour Code: Darker the colour, higher the shortage of Specialists in Paediatrics Speciality (DHs)

- **Anaesthetist:** No Anaesthetist was posted in DH Malerkotla and DH Sri Muktsar Sahib against three sanctioned posts; in two DHs, (Jalandhar and Sangrur), significant shortage of Anaesthetist was seen wherein only four Anaesthetists were posted against 13 sanctioned posts whereas in two DHs (Ludhiana and Mohali), 13 Anaesthetists were posted against 10 sanctioned posts.
- **ENT Surgeon:** In DH Sri Muktsar Sahib, no ENT surgeon was posted against one sanctioned post whereas in eight⁸ DHs, 19 ENT surgeons were posted against nine sanctioned posts. Thus, in all DHs, against 25 sanctioned posts of ENT surgeon, 34 ENT surgeons were posted (36 *per cent* in excess) except DH Sri Muktsar Sahib.
- **Ophthalmologist:** In two DHs (Amritsar and Malerkotla), no Ophthalmologist was posted against two sanctioned posts whereas in 11⁹ DHs, 26 Ophthalmologists were posted against 11 sanctioned posts. Thus, against 25 sanctioned posts of Ophthalmologists in all DHs, 37 Ophthalmologists i.e. 48 *per cent* were posted in excess.
- **Orthopaedician:** In four DHs (Amritsar, Hoshiarpur, Jalandhar and Pathankot), only 13 Orthopaedicians were posted against 19 sanctioned posts whereas in nine¹⁰ DHs, 21 Orthopaedician were posted against 10 sanctioned posts.
- **Radiologist:** In DHs, 58 *per cent* Radiologists were short and out of 23 DHs, no Radiologist was posted in 13¹¹ DHs against 13 sanctioned posts.

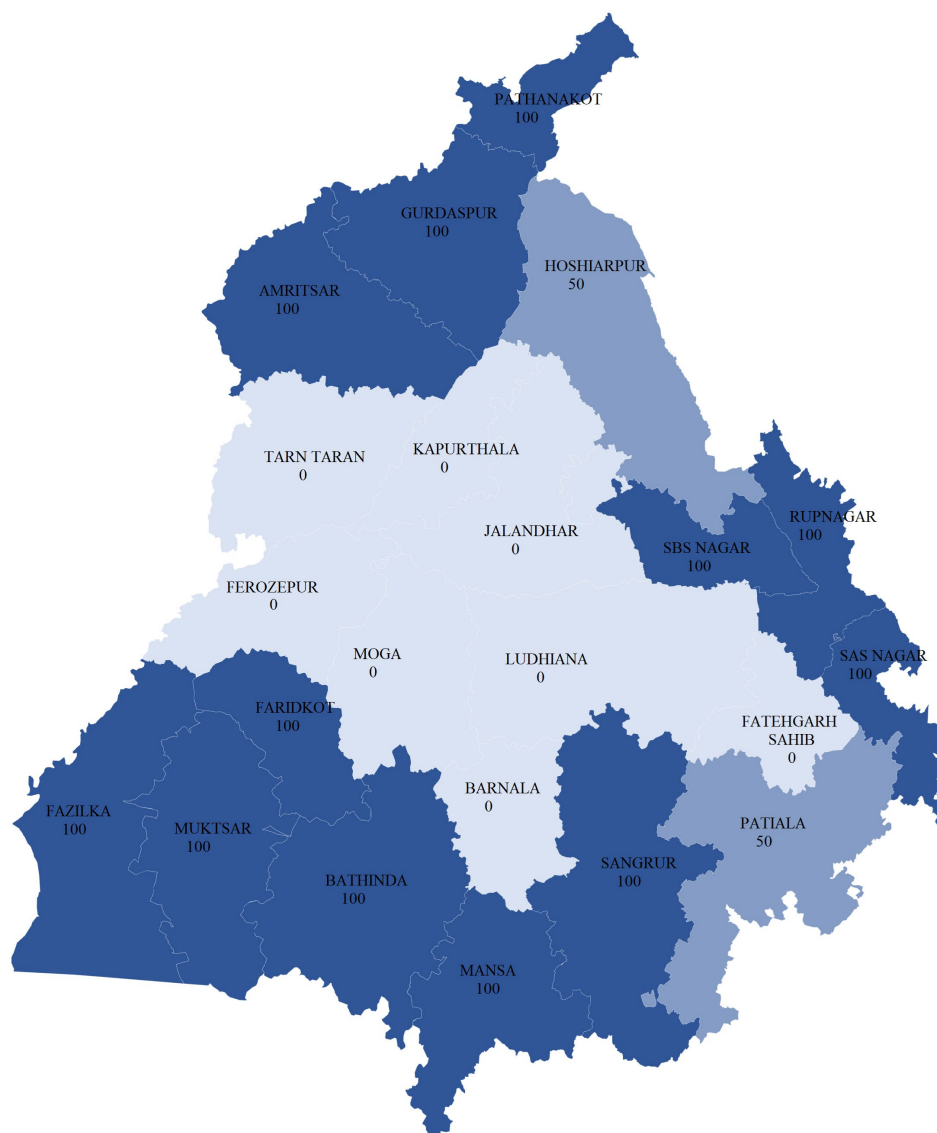
⁸ DHs at (i) Bathinda; (ii) Faridkot; (iii) Fatehgarh Sahib; (iv) Hoshiarpur; (v) Moga; (vi) Pathankot; (vii) Rupnagar; and (viii) SAS Nagar.

⁹ DHs at (i) Barnala; (ii) Bathinda; (iii) Faridkot; (iv) Hoshiarpur; (v) Mansa; (vi) Moga; (vii) Pathankot; (viii) Patiala; (ix) Sangrur; (x) SAS Nagar; and (xi) SBS Nagar.

¹⁰ DHs at (i) Bathinda; (ii) Faridkot; (iii) Fatehgarh Sahib; (iv) Ferozepur; (v) Gurdaspur; (vi) Moga; (vii) Patiala; (viii) Rupnagar; and (ix) Sangrur.

¹¹ DHs at (i) Amritsar; (ii) Bathinda; (iii) Faridkot; (iv) Fazilka; (v) Gurdaspur; (vi) Malerkotla; (vii) Mansa; (viii) Pathankot; (ix) Ludhiana; (x) Sangrur; (xi) SAS Nagar; (xii) SBS Nagar; and (xiii) Sri Muktsar Sahib.

Chart 2.9: Excess/shortage (in per cent) of Radiology Specialists (DHs) as on 31.03.2023



Source: DH&FW data

District Malerkotla was carved out of Sangrur district but could not be depicted in the map drawn through MS Excel (Microsoft 365).

Colour Code: Darker the colour, higher the shortage of Radiology Specialist (DHs)

- **Microbiologist:** In DH Malerkotla, neither the post of Microbiologist was sanctioned nor posted; in three DHs (Barnala, Bathinda and Mansa), no Microbiologist was posted against three sanctioned posts, whereas in five DHs (Amritsar, Faridkot, Gurdaspur, SAS Nagar and Tarn Taran), 14 microbiologists were posted against eight sanctioned posts.
- **Medical Officer (General Duty):** A huge shortage (46 per cent) of staff in Medical Officer (General Duty) cadre was seen in DHs. Moreover, in five DHs (Barnala, Faridkot, Kapurthala, Moga and SBS Nagar), shortage was more than 73 per cent.

- **Dental Surgeon:** No Dental Surgeon was posted in DH Tarn Taran and two Dental Surgeons were posted in MKH Patiala against one and four sanctioned posts respectively, whereas in four DHs (Amritsar, Bathinda, Faridkot and Hoshiarpur), 12 Dental Surgeons were posted against six sanctioned posts.
- **Forensic Specialist:** In DHs, 56 *per cent* Forensic Specialists were short and no Forensic Specialist was posted against nine sanctioned posts in eight¹² DHs.
- **Pathologist:** In three DHs (Fatehgarh Sahib, Jalandhar and SAS Nagar), only four Pathologists were posted against eight sanctioned posts whereas in nine¹³ DHs, 26 Pathologists were posted against 13 sanctioned posts, i.e. 13 Pathologists were posted in excess.

Thus, it is seen from the above details that in some DHs even a single doctor was not deployed in some of the specialities, whereas in some DHs, specialists were deployed in excess. Therefore, specialist doctors were not posted according to requirement.

(ii) Staff Nurses

- In DHs, only 1,237 Staff Nurses were available against 1,568 sanctioned posts leading to shortage of 331 Staff Nurses (21 *per cent*). In six DHs (Barnala, Jalandhar, Kapurthala, Malerkotla, Mansa and Sri Muktsar Sahib), significant shortage of Staff Nurses ranging between 36 *per cent* and 48 *per cent* was seen. However, in DH Tarn Tarn, 63 Staff Nurses were posted against 59 sanctioned posts.

(iii) Paramedical Staff

- **Ophthalmic Assistant/Refractionist:** In five DHs (Amritsar, Barnala, Fatehgarh Sahib, Fazilka and Malerkotla), no Ophthalmic Assistant was posted against five sanctioned posts. In DH Ludhiana, one Ophthalmic Assistant was posted against two sanctioned posts and in the remaining DHs, adequate number of Ophthalmic Assistants were available against the sanctioned posts.
- **Social Workers:** In two DHs (Kapurthala and Ludhiana), only 12 Social Workers were posted against 18 sanctioned posts whereas in three DHs (Bathinda, Sangrur and Tarn Taran), 24 Social Workers (118 *per cent* in excess) were posted against 11 sanctioned posts. Moreover, 11 Social Workers were posted in two DHs (Mansa, Moga) without any sanctioned post.

¹² DHs at (i) Barnala; (ii) Faridkot; (iii) Ferozepur; (iv) Mansa; (v) Patiala; (vi) Rupnagar; (vii) SBS Nagar; and (viii) Tarn Taran.

¹³ DHs at (i) Bathinda; (ii) Ferozepur; (iii) Gurdaspur; (iv) Kapurthala; (v) Mansa; (vi) Moga; (vii) Pathankot; (viii) Patiala; and (ix) Tarn Taran.

- **ECG Technician:** No ECG Technician was posted in six DHs (Bathinda, Fatehgarh Sahib, Hoshiarpur, Kapurthala, Mansa and SAS Nagar) against six sanctioned posts whereas in DH Tarn Tarn, one ECG Technician was posted without any sanctioned post. In eight¹⁴ DHs, post of ECG Technician was not sanctioned. In two DHs (Moga and Rupnagar), only four ECG Technicians were posted against six sanctioned posts and in the remaining DHs, adequate ECG Technicians were available.
- **ECHO Technician:** In three DHs (Bathinda, Rupnagar and SAS Nagar), no ECHO Technician was available against three sanctioned posts. In the remaining 20 DHs, post of ECHO Technician was not sanctioned.
- **Audiometrician:** No Audiometrician was posted in six DHs (Barnala, Bathinda, Fatehgarh Sahib, Ferozepur, Sangrur and SAS Nagar) against six sanctioned posts. No post of Audiometrician was sanctioned for 14 DHs¹⁵ and in two DHs (Malerkotla and Rupnagar), only eight Audiometricians were posted against 12 sanctioned posts. In DH Tarn Taran, Audiometrician was available as per sanctioned post.
- **Laboratory Technician:** In 10 DHs¹⁶, only 112 Laboratory Technicians were posted against 140 sanctioned posts (20 *per cent* short) whereas in five DHs¹⁷, 69 Laboratory Technicians (53 *per cent* excess) were posted against 45 sanctioned posts. In DH Malerkotla, post of Laboratory Technician was not sanctioned and in the remaining seven DHs, adequate Laboratory Technicians were available against the sanctioned posts.
- **Laboratory Attendant:** In three DHs (Jalandhar, Moga and Rupnagar), no Laboratory Attendant was posted against seven sanctioned posts whereas in two DHs (SAS Nagar and Tarn Taran), two Laboratory Attendants were posted without any sanctioned post. In ten DHs¹⁸ including above two, post of Laboratory Attendant was not sanctioned and in the remaining 10 DHs, only 16 Laboratory Attendants were available against 18 sanctioned posts.
- **Dietician:** In two DHs (Jalandhar and Sri Muktsar Sahib), three posts were sanctioned but no Dietician was posted. In 19 DHs, post of

¹⁴ DHs at (i) Fazilka; (ii) Ferozepur; (iii) Gurdaspur; (iv) Malerkotla; (v) Pathankot; (vi) Sangrur; (vii) SBS Nagar; and (viii) Sri Muktsar Sahib.

¹⁵ DHs at (i) Amritsar; (ii) Faridkot; (iii) Fazilka; (iv) Gurdaspur; (v) Hoshiarpur; (vi) Jalandhar; (vii) Kapurthala; (viii) Ludhiana; (ix) Mansa; (x) Moga; (xi) Pathankot; (xii) Patiala; (xiii) SBS Nagar; and (xiv) Sri Muktsar Sahib.

¹⁶ DHs at (i) Barnala; (ii) Fazilka; (iii) Ferozepur; (iv) Hoshiarpur; (v) Jalandhar; (vi) Kapurthala; (vii) Ludhiana; (viii) Pathankot; (ix) Rupnagar; and (x) Sri Muktsar Sahib.

¹⁷ DHs at (i) Bathinda; (ii) Fatehgarh Sahib; (iii) Mansa; (iv) Moga; and (v) Tarn Taran.

¹⁸ DHs at (i) Amritsar; (ii) Bathinda; (iii) Ferozepur; (iv) Hoshiarpur; (v) Malerkotla; (vi) Mansa; (vii) Pathankot; (viii) Sangrur; (ix) SAS Nagar; and (x) Tarn Taran.

Dietician was not sanctioned and in the remaining DHs (Hoshiarpur and Patiala), two Dieticians were available against equal sanctioned posts.

- **Maternity Assistant (ANM):** In two DHs (Jalandhar and SBS Nagar), no ANM was posted against five sanctioned posts and in DHs at Ludhiana and Malerkotla, only 11 ANMs were posted against 20 sanctioned posts whereas in four DHs (Fazilka, Kapurthala, Sangrur and SAS Nagar), 21 ANMs were posted against eight sanctioned posts. In ten DHs¹⁹, only 26 ANMs were available against 30 sanctioned posts and in the remaining six DHs including SAS Nagar, post of ANM was not sanctioned.
- **Radiographer:** In seven DHs²⁰, only 20 Radiographers were posted against 30 sanctioned posts whereas in two DHs (Bathinda and Tarn Taran), 16 Radiographers (129 *per cent* excess) were posted against seven sanctioned posts. In the remaining 14 DHs, adequate number of Radiographers were available against the sanctioned posts.
- **Dark Room Assistant:** Only six Dark Room Assistants (57 *per cent* short) were available against 14 sanctioned posts for 14 DHs (one post for each DH) and no post of Dark Room Assistant was sanctioned for remaining nine DHs²¹.
- **Pharmacist:** In 15 DHs²², only 68 Pharmacists were available against 93 sanctioned posts (27 *per cent* short) whereas in two DHs (Bathinda and Tarn Taran), 23 Pharmacists were posted against 15 sanctioned posts. However, in the remaining six DHs, adequate number of Pharmacists were available.
- **Physiotherapist:** In four DHs (Bathinda, Sangrur, SAS Nagar and SBS Nagar), no Physiotherapist was available against eight sanctioned posts whereas in DH Patiala, three Physiotherapists were posted without any sanctioned post. In three DHs (Jalandhar, Ludhiana and Rupnagar), only six Physiotherapists were posted against 12 sanctioned posts (50 *per cent* short). In three DHs (Fazilka, Ferozepur and Malerkotla), post of Physiotherapist was not sanctioned, however, in remaining 12 DHs, adequate number of Physiotherapists were available.

¹⁹ DHs at (i) Barnala; (ii) Bathinda; (iii) Faridkot; (iv) Fatehgarh Sahib; (v) Ferozepur; (vi) Hoshiarpur; (vii) Moga; (viii) Patiala; (ix) Rupnagar; and (x) Sri Muktsar Sahib.

²⁰ DHs at (i) Barnala; (ii) Fatehgarh Sahib; (iii) Ludhiana; (iv) Malerkotla; (v) Rupnagar; (vi) Sangrur; and (vii) Sri Muktsar Sahib.

²¹ DHs at (i) Amritsar; (ii) Barnala; (iii) Fatehgarh Sahib; (iv) Fazilka; (v) Gurdaspur; (vi) Malerkotla; (vii) Pathankot; (viii) SAS Nagar; and (ix) Tarn Taran.

²² DHs at (i) Amritsar; (ii) Fatehgarh Sahib; (iii) Fazilka; (iv) Gurdaspur; (v) Hoshiarpur; (vi) Jalandhar; (vii) Kapurthala; (viii) Ludhiana; (ix) Malerkotla; (x) Mansa; (xi) Moga; (xii) Pathankot; (xiii) Patiala; (xiv) Rupnagar; and (xv) Sri Muktsar Sahib.

From the above, it was seen that paramedical staff was not posted as per sanctioned posts as well as requirement and in some DHs, the staff was posted over and above the sanctioned posts which resulted in disproportionate posting of paramedical staff in DHs.

(iv) Position of other staff

In all DHs, only 973 persons were available against 1,219 sanctioned posts under other staff category, therefore, there was 20 *per cent* shortage of staff. It was also noticed that in three DHs (Amritsar, Moga and Tarn Taran) excess staff i.e. 185 persons against 145 were posted. Post-wise analysis of other staff is as under:

- **Statistical Assistant:** In six DHs²³, no Statistical Assistant was posted against six sanctioned posts, however, in DH Tarn Taran, one Statistical Assistant was posted without any sanctioned post. In two DHs (Bathinda and Malerkotla), only two Statistical Assistants were available against four sanctioned posts and in seven DHs²⁴ including Tarn Taran, post of Statistical Assistant was not sanctioned.
- **Medical Records Officer/Technician:** No Medical Records Officer/Technician was posted against four sanctioned posts in four DHs²⁵; and in the remaining 19 DHs, post of Medical Record Officer/Technician was not sanctioned.
- **Electrician:** In DH Hoshiarpur, no Electrician was posted against one sanctioned post and on the other hand, one Electrician was posted in DH Sangrur without sanctioned post. In six DHs²⁶ including Sangrur, post of Electrician was not sanctioned and in five DHs²⁷, only seven Electricians were available against 12 sanctioned posts (42 *per cent* short).
- **Plumber:** In 10 DHs²⁸, post of Plumber was not sanctioned. Moreover, no plumber was posted in five DHs²⁹ against the five sanctioned posts. In five DHs³⁰, only five Plumbers were available against 10 sanctioned posts (50 *per cent* short).

²³ DHs at (i) Barnala; (ii) Ferozepur; (iii) Hoshiarpur; (iv) Sangrur; (v) SAS Nagar; and (vi) SBS Nagar.

²⁴ DHs at (i) Faridkot; (ii) Fatehgarh Sahib; (iii) Gurdaspur; (iv) Jalandhar; (v) Pathankot; (vi) Sri Muktsar Sahib; and (vii) Tarn Taran.

²⁵ DHs at (i) Malerkotla; (ii) Moga; (iii) Rupnagar; and (iv) Sangrur.

²⁶ DHs at (i) Amritsar; (ii) Fatehgarh Sahib; (iii) Moga; (iv) Sangrur; (v) SAS Nagar; and (vi) SBS Nagar.

²⁷ DHs at (i) Bathinda; (ii) Ferozepur; (iii) Gurdaspur; (iv) Ludhiana; and (v) Sri Muktsar Sahib.

²⁸ DHs at (i) Amritsar; (ii) Barnala; (iii) Fatehgarh Sahib; (iv) Fazilka; (v) Hoshiarpur; (vi) Malerkotla; (vii) Moga; (viii) SAS Nagar; (ix) SBS Nagar; and (x) Tarn Taran.

²⁹ DHs at (i) Bathinda; (ii) Kapurthala; (iii) Mansa; (iv) Pathankot; and (v) Patiala.

³⁰ DHs at (i) Ferozepur; (ii) Gurdaspur; (iii) Jalandhar; (iv) Ludhiana; and (v) Sri Muktsar Sahib.

- **Hospital Workers:** In 15 DHs³¹, only 463 Hospital Workers were available against 728 sanctioned posts (36 *per cent* short) whereas in DH Amritsar, 15 Hospital Workers were posted without any sanctioned post. In the remaining eight DHs including Amritsar, no post of Hospital Worker was sanctioned.
- **Sanitary Workers:** In three DHs (Bathinda, Moga and Tarn Taran), 126 Sanitary Workers were posted against 31 sanctioned posts. In six DHs³², only 163 Sanitary Workers were posted against 223 sanctioned posts (27 *per cent* short) and in eight DHs³³, post of Sanitary Worker was not sanctioned.

Non-posting of manpower against the sanctioned posts, shortage of staff and excess posting in DHs over and above the sanctioned strength affected the healthcare services as mentioned subsequently in **Paragraphs 3.1.1 and 3.2.1** of the Report.

The reply of the State Government was awaited (February 2024).

2.5.2 Community Health Centres

2.5.2.1 Availability of human resources in Community Health Centres

Availability of staff (regular) against the sanctioned posts in CHCs is depicted in **Appendix 2.2** and **Table 2.11**.

Table 2.11: Availability of staff for various posts in CHCs as of March 2023

Number of CHCs	Specialists/Doctors*				Nurses				Paramedics*				Other staff		
	R	S	P	V (in per cent)	R	S	P	V (in per cent)	R	S	P	V (in per cent)	S	P	V (in per cent)
150	1,200	1,490	816	45	1,650	1,771	1,202	32	1,050	1,339	990	26	2,198	1,378	37
Shortage against IPHS 2012 norms (in per cent)				32				27				6			

Source: DH&FW, Punjab

R = Required as per IPHS 2012 norms; S = Sanctioned post; P = In position; and V = Vacant post.

* Posts of Dental Surgeon, Dental Assistant, Cold Chain & Vaccine Logistic Assistant, Multi Rehabilitation/Community based Rehabilitation worker and Counsellor as per IPHS norms were not available on the sanctioned strength of CHCs. Further, details of sanctioned strength as well as persons-in-position for the posts of ANM (S-55, P-35) and Dialysis Technician (S-01, P-00) are not included in paramedical staff as these two posts are not defined under IPHS norms 2012.

Note: Requirement of manpower in respect of other staff could not be compared, as posts related to these categories under IPHS norms and sanctioned posts differed.

Colour code:

	Green denotes 'least shortage'
	Yellow denotes 'moderate shortage'

³¹ DHs at (i) Barnala; (ii) Bathinda; (iii) Fazilka; (iv) Ferozepur; (v) Kapurthala; (vi) Ludhiana; (vii) Malerkotla; (viii) Moga; (ix) Pathankot; (x) Patiala; (xi) Rupnagar; (xii) SAS Nagar; (xiii) SBS Nagar; (xiv) Sri Muktsar Sahib; and (xv) Tarn Taran.

³² DHs at (i) Barnala; (ii) Fazilka; (iii) Ferozepur; (iv) Ludhiana; (v) Malerkotla; and (vi) Rupnagar.

³³ DHs at (i) Fatehgarh Sahib; (ii) Gurdaspur; (iii) Jalandhar; (iv) Kapurthala; (v) Mansa; (vi) Sangrur; (vii) SBS Nagar; and (viii) Sri Muktsar Sahib.

The above table shows that in CHCs, only 816 Specialist Doctors/Medical Officers were available against 1,200 posts as per IPHS norms and 1,490 sanctioned posts; 1,202 Staff Nurses were available against 1,650 posts as per IPHS norms and 1,771 sanctioned posts; 990 (excluding ANMs and Dialysis Technician) paramedical staff were available against 1,050 posts as per IPHS norms and 1,339 sanctioned posts; and in case of other staff, only 1,378 persons against 2,198 sanctioned posts were available. Thus, there was overall shortage of 32 per cent and 45 per cent in Specialist Doctors/Medical Officers against IPHS norms and sanctioned strength; 27 per cent and 32 per cent in Staff Nurses against IPHS 2012 norms and sanctioned strength; 6 per cent and 26 per cent in paramedical staff against IPHS norms and sanctioned strength respectively; and 37 per cent in other staff against sanctioned posts.

2.5.2.2 Availability of Specialists in CHCs

Details of availability of Specialists in CHCs as on 31.03.2023 are given in **Table 2.12**.

Table 2.12: Availability of Specialists in CHCs

Sr. No.	Name of Speciality	Requirement as per IPHS 2012 norms	Requirement as per sanctioned strength	Availability	Shortage against IPHS norms	Shortage against sanctioned strength	Shortage in per cent (IPHS)	Shortage in per cent (SS)
1.	General Surgeon	150	135	40	110	95	73	70
2.	Physician	150	128	29	121	99	81	77
3.	Obstetrician/ Gynaecologist	150	169	45	105	124	70	73
4.	Paediatrics	150	164	44	106	120	71	73
5.	Anesthetist	150	62	16	134	46	89	74
6.	Eye Surgeon	0	23	6	+6	17	-	74

Source: Information furnished by DH&FW Punjab

Colour code: Red depicts 'most shortage'

There was substantial shortage of critical specialists in CHCs which ranged between 70 per cent and 89 per cent against IPHS 2012 norms; and between 70 per cent and 77 per cent against sanctioned strength.

The details of non-posting/disproportionate posting of human resources in CHCs are as under:

- **General Surgeon:** In 97 CHCs, no General Surgeon was posted against 97 sanctioned posts. In 38 CHCs, adequate General Surgeons were available against sanctioned posts. In the remaining 15 CHCs, post of General Surgeon was not sanctioned.
- **Physician:** In 99 CHCs, no Physician was posted against 99 sanctioned posts. In 28 CHCs, adequate number of Physicians were available against sanctioned posts. In the remaining 23 CHCs, post of Physician was not sanctioned.

- **Obstetrician/Gynaecologist:** In 100 CHCs, no Obstetrician/Gynaecologist was posted against 114 sanctioned posts. In 40 CHCs, only 45 Obstetricians/Gynaecologists were available against 55 sanctioned posts. In the remaining 10 CHCs, post of Obstetrician/Gynaecologist was not sanctioned.
- **Paediatrician:** In 91 CHCs, no Paediatrician was posted against 104 sanctioned posts. In 42 CHCs, only 44 Paediatricians were available against 60 sanctioned posts. In the remaining 17 CHCs, post of Paediatrician was not sanctioned.
- **Anaesthetist:** In 47 CHCs, no Anaesthetist was posted against 47 sanctioned posts. In 15 CHCs, adequate number of Anaesthetists were available against sanctioned posts. In the remaining 88 CHCs, post of Anaesthetist was not sanctioned. Moreover, one Anaesthetist was posted in CHC Adampur without any sanctioned post.
- **Eye Surgeon:** In 19 CHCs, no Eye Surgeon was posted against 19 sanctioned posts. In four CHCs, adequate Eye Surgeons were available against sanctioned posts. In the remaining 127 CHCs, post of Eye Surgeon was not sanctioned. Moreover, two Eye Surgeons were posted in CHCs at Verka and Khera without any sanctioned post.
- **Medical Officer:** In 10 CHCs, no Medical Officer was posted against 24 sanctioned posts. In 101 CHCs, only 241 Medical Officers were available against 352 sanctioned posts. Further, in 39 CHCs, Medical Officers were posted in excess i.e. 150 Medical Officers were posted against 68 sanctioned posts.
- **Staff Nurse:** Only 1,202 Staff Nurses were available in all CHCs against 1,771 sanctioned posts resulting in shortage of 32 *per cent*.
- **Paramedical staff:** Only 1,025 paramedical staff were available in all CHCs against 1,395 sanctioned posts resulting in shortage of 370 paramedical staff (27 *per cent*). Significant shortage of 49 *per cent* and 61 *per cent* in cadre of Ophthalmic Assistants and OT Attendants respectively was seen.
- **Other staff:** Only 1,378 number of other staff were available in all CHCs against 2,198 sanctioned posts. Thus, there was shortage of 37 *per cent*.

The reply of the State Government was awaited (February 2024).

2.5.3 Primary Health Centres

2.5.3.1 Availability of human resources in Primary Health Centres

Availability of staff (regular) against the sanctioned posts in PHCs is depicted in *Appendix 2.3* and **Table 2.13**.

Table 2.13: Availability of human resources in PHCs as of March 2023

Number of PHCs	Doctors				Nurses				Paramedics				Other staff			
	R	S	P	V (in per cent)	R	S	P	V (in per cent)	R	S	P	V (in per cent)	S	P	V (in per cent)	
424	424	645	442	31	1,272	1,146	575	50	848	1,082	717	34	1,965	1,140	42	
Shortage against IPHS 2012 norms (in per cent)				+4					55							

Source: DH&FW, Punjab

R = Required as per IPHS 2012 norms; S = Sanctioned post; P = In position; and V = Vacant post.

Note: Requirement of manpower in respect of other staff could not be compared, as posts related to these categories under IPHS norms and sanctioned posts differed.

Colour code:

	Green denotes 'least shortage'
	Yellow denotes 'moderate shortage'

Scrutiny of information regarding human resources in 424 PHCs provided by Director, Health and Family Welfare revealed that:

- **Medical Officer:** Against the IPHS norms, adequate number of Medical Officers were available in PHCs but against 645 sanctioned posts, only 442 Medical Officers were available, thus, there was a shortage of 31 per cent against the sanctioned strength. Moreover, in 86 PHCs, no Medical Officer was posted against the sanctioned posts.
- **Staff Nurse:** Only 575 Staff Nurses were available against 1,272 posts as per IPHS norms and 1,146 sanctioned posts resulting into shortage of 55 per cent and 50 per cent respectively. Moreover, in 126 PHCs, no Staff Nurse was posted against the sanctioned posts.
- **Paramedical staff:** Only 717 paramedical staff were available against 848 posts as per IPHS norms and 1,082 sanctioned posts resulting into shortage of 15 per cent and 34 per cent respectively. There was shortage of Pharmacists (28 per cent) and Lab Technicians (41 per cent). Moreover, in 77 PHCs, no Pharmacist and in 171 PHCs, no Lab Technician was posted against the sanctioned posts.
- **Other staff:** Only 1,140 staff (which includes Clerk, Health Assistant, Driver, Class IV, etc.) were available against 1,965 sanctioned posts, thus, there was shortage of 42 per cent.

The reply of the State Government was awaited (February 2024).

2.5.4 Availability of human resources in Tertiary Care Hospitals

The details of sanctioned/filled posts of Professors/Associate Professors, Assistant Professors, Staff Nurses and paramedical staff as on 31.03.2023 in four tertiary care hospitals are given in **Table 2.14**.

Table 2.14: Position of medical and paramedical staff in Tertiary Care Hospitals

Sr. No.	Cadre	Name of Medical College and Hospital											
		Rajindra Hospital, Patiala			Guru Nanak Dev Medical College and Hospital, Amritsar			Guru Gobind Singh Medical College and Hospital, Faridkot			Dr. B.R. Ambedkar State Institute of Medical Sciences, SAS Nagar		
		SS	PIP	Short age (in per cent)	SS	PIP	Short age (in per cent)	SS	PIP	Short age (in per cent)	SS	PIP	Short age (in per cent)
1.	Professor	78	46	41	77	43	44	39	30	23	21	11	48
2.	Associate Professor	92	36	61	91	38	58	64	40	38	24	15	38
3.	Assistant Professor	160	92	43	162	96	41	97	37	62	37	34	8
4.	Staff Nurse	1200	965	20	1200	1050	13	655	400	39	247	115	53
5.	Paramedical staff	454	237	48	357	245	31	192	107	44	151	67	56

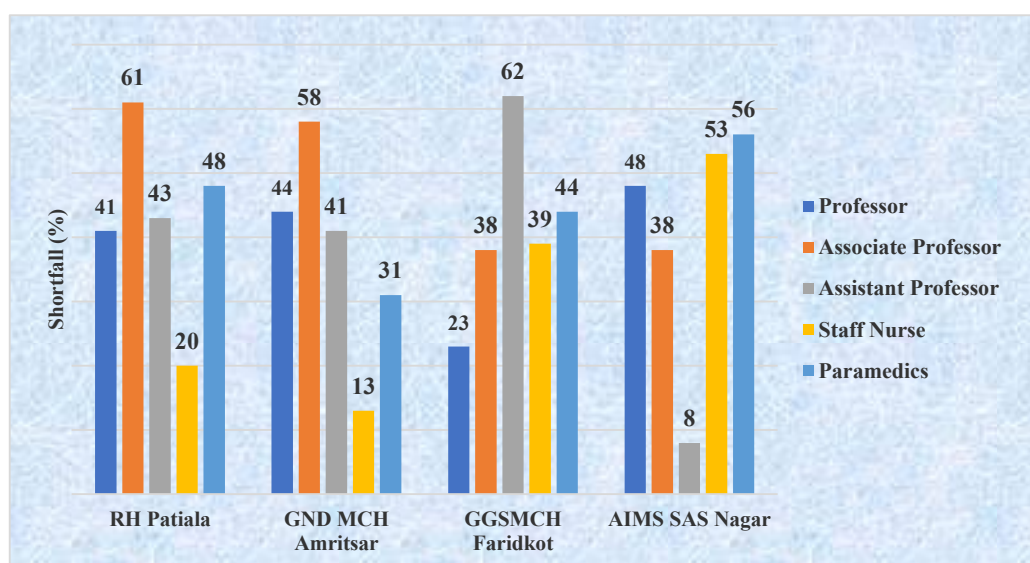
Source: Departmental data

SS = Sanctioned Strength; PIP = Persons-in-Position

Colour code:

	Green denotes 'least shortage'
	Yellow denotes 'moderate shortage'

Chart 2.10: Vacant posts in four Medical Colleges under DMER (in per cent)



Source: DMER and Medical Colleges

Scrutiny of information regarding human resources in four tertiary care hospitals revealed that:

- **Professor:** There was shortage of Professors in Rajindra Hospital, Patiala (41 per cent); GNDMCH Amritsar (44 per cent); GGSMCH, Faridkot (23 per cent); and Dr. B.R. Ambedkar State Institute of Medical Sciences, SAS Nagar (48 per cent).

- **Associate Professor:** There was shortage of Associate Professors in Rajindra Hospital, Patiala (61 per cent); GNDMCH, Amritsar (58 per cent); GGSMCH, Faridkot (38 per cent); and Dr. B.R. Ambedkar State Institute of Medical Sciences, SAS Nagar (38 per cent).
- **Assistant Professor:** There was shortage of Assistant Professors in Rajindra Hospital, Patiala (43 per cent); GNDMCH, Amritsar (41 per cent); GGSMCH, Faridkot (62 per cent); and Dr. B.R. Ambedkar State Institute of Medical Sciences, SAS Nagar (8 per cent).
- **Staff Nurse:** There was shortage of Staff Nurses in Rajindra Hospital, Patiala (20 per cent); GNDMCH, Amritsar (13 per cent.); GGSMCH, Faridkot (39 per cent); Dr. B.R. Ambedkar State Institute of Medical Sciences, SAS Nagar (53 per cent).
- **Paramedical staff:** There was shortage of paramedical staff in Rajindra Hospital, Patiala (48 per cent); GNDMCH, Amritsar (31 per cent); GGSMCH, Faridkot (44 per cent); and Dr. B.R. Ambedkar State Institute of Medical Sciences, SAS Nagar (56 per cent).

The reply of the State Government was awaited (February 2024).

2.5.5 Shortage of staff and its impact on delivery of health services in test-checked health institutions

2.5.5.1 DHs, CHCs and PHCs

The number of sanctioned and filled posts of Medical Officers, Nursing staff, and Paramedical staff in the test-checked districts as on 31.03.2023 is given in Table 2.15.

Table 2.15: Position of staff in test-checked districts

Name of District	Name of Institution	Specialists/Doctors (Medical Officers)					Nursing Staff					Paramedical staff*				
		R	S	P	V/E (in per cent) as per IPHS norms	V/E (in per cent) as per S	R	S	P	V/E (in per cent) as per IPHS norms	V/E (in per cent) as per S	R	S	P	V/E (in per cent) as per IPHS norms	V/E (in per cent) as per S
Bathinda	DH	34	59	52	+53	12	90	94	82	9	13	31	37	52	+68	+41
	CHCs	16	17	6	63	65	22	8	10	55	+25	14	10	9	36	10
	PHCs	4	8	5	+25	38	12	15	8	33	47	8	9	4	50	56
Total		54	84	63	+17	25	124	117	100	19	15	53	56	65	+23	+16
Fatehgarh Sahib	DH	29	47	34	+17	28	45	49	39	13	20	22	31	30	+36	3
	CHCs	16	14	7	56	50	22	25	16	27	36	14	14	9	36	36
	PHCs	4	8	7	+75	13	12	15	12	0	20	8	13	10	+25	23
Total		49	69	48	2	30	79	93	69	13	26	44	58	49	+11	16

Name of District	Name of Institution	Specialists/Doctors (Medical Officers)					Nursing Staff					Paramedical staff*				
		R	S	P	V/E (in per cent) as per IPHS norms	V/E (in per cent) as per S	R	S	P	V/E (in per cent) as per IPHS norms	V/E (in per cent) as per S	R	S	P	V/E (in per cent) as per IPHS norms	V/E (in per cent) as per S
Gurdaspur	DH	34	38	46	+35	+21	90	77	59	34	23	31	26	24	23	8
	CHCs	16	28	21	+31	25	22	28	21	5	25	14	30	28	+100	7
	PHCs	4	11	10	+150	9	12	22	18	+50	18	8	20	17	+113	15
Total		54	77	77	+43	0	124	127	98	21	23	53	76	69	+30	9
Hoshiarpur	DH	34	57	55	+62	4	90	80	57	37	29	31	44	38	+23	14
	CHCs	16	17	10	38	41	22	23	16	27	30	14	8	5	64	38
	PHCs	4	9	5	+25	44	12	20	15	+25	25	8	21	16	+100	24
Total		54	83	70	+30	16	124	123	88	29	28	53	73	59	+11	19
Ludhiana	DH	50	56	44	12	21	135	78	66	51	15	47	47	30	36	36
	CHCs	16	25	14	13	44	22	26	22	00	15	14	24	12	14	50
	PHCs	4	6	6	+50	0	12	12	10	17	17	8	9	8	0	11
Total		70	87	64	9	26	169	116	98	42	16	69	80	50	28	38
Moga	DH	34	46	28	18	39	90	54	53	41	2	31	18	26	16	+44
	CHCs	16	20	5	69	75	22	31	24	+9	23	14	20	14	0	30
	PHCs	4	8	3	25	63	12	14	5	58	64	8	15	10	+25	33
Total		54	74	36	33	51	124	99	82	7	17	53	53	50	6	6

Source: DH&FW in respect of test-checked districts

R= Required as per IPHS 2012 norms; S= Sanctioned post; P= In position; V= Vacant post; E= Excess.

* Details of sanctioned strength as well as persons-in-position for the posts of ANM (S-17, P-12) and Lab Attendant (S-9, P-7) in test-checked DHs and ANM (S-4, P-2) in test-checked CHCs are not included in paramedical staff as these posts are not defined under IPHS norms 2012.

Colour code:

	Dark green colour denotes 'excess manpower'
	Light green colour denotes 'least shortage'
	Yellow colour denotes 'moderate shortage'
	Red colour denotes 'most shortage'

Table 2.15 shows that as per IPHS norms and sanctioned strength, higher shortage in case of Medical Officers was seen in district Moga (33 per cent and 51 per cent) followed by Fatehgarh Sahib (2 per cent and 30 per cent), Ludhiana (9 per cent and 26 per cent) respectively as compared to other test-checked districts. Further, shortage in case of nursing staff was seen in districts Hoshiarpur (28 per cent) and Fatehgarh Sahib (26 per cent) against sanctioned strength as compared to other test-checked districts. However, as per IPHS norms, shortage of nursing staff in all the test-checked districts was also seen ranging between 7 and 42 per cent. Similarly, higher shortage in case of paramedical staff was also seen in district Ludhiana (38 per cent), Hoshiarpur (19 per cent) and Fatehgarh Sahib (16 per cent) against the sanctioned posts. It was also noticed that medical officer (21 per cent) in DH

Gurdaspur, staff nurse (25 per cent) in CHCs of Bathinda district and paramedics (44 per cent and 41 per cent) in DH Moga and Bathinda was posted in excess, which represented that available manpower had not been distributed uniformly across the districts.

The position of availability of requisite staff in the selected 24 PHCs against the sanctioned strength as on 31.03.2023 is given in **Table 2.16**.

Table 2.16: Position of staff in test-checked PHCs

Name of PHC	Doctor			Staff Nurse			Pharmacist			Laboratory Technician		
	R	SS	PIP	R	SS	PIP	R	SS	PIP	R	SS	PIP
Lehra Mohabbat	1	3	3	3	4	2	1	2	2	1	1	0
Mandi Kalan	1	2	2	3	4	2	1	1	1	1	1	0
Bhai Rupa	1	2	0	3	4	4	1	1	1	1	1	0
Jodhpur Pakhar	1	1	0	3	3	0	1	1	0	1	1	0
Nandpur Kalour	1	5	4	3	7	5	1	3	3	1	2	2
Bhari	1	1	1	3	4	2	1	1	1	1	1	1
Nanowal	1	1	1	3	0	0	1	1	0	1	1	0
Sanghol	1	1	1	3	4	5	1	2	2	1	2	1
Dhianpur	1	1	1	3	5	3	1	1	1	1	3	3
Ranjit Bagh	1	3	2	3	2	2	1	3	2	1	2	1
Behrampur	1	2	2	3	7	7	1	4	3	1	2	2
Dorangala	1	5	5	3	8	6	1	2	2	1	3	3
Mand Bhandar	1	2	2	3	1	1	1	2	2	1	1	1
Possi	1	1	0	3	6	4	1	1	1	1	2	2
Paldi	1	3	2	3	8	5	1	6	4	1	2	1
Chakowal	1	3	1	3	5	5	1	4	2	1	3	3
Sawaddi Kalan	1	1	1	3	0	0	1	1	1	1	0	0
Ghawaddi	1	2	2	3	4	3	1	1	1	1	1	1
Mansooran	1	2	2	3	7	7	1	3	3	1	1	1
Otalon	1	1	1	3	1	0	1	1	1	1	1	0
Sukhanand	1	1	1	3	3	1	1	2	2	1	1	0
Thathi Bhai	1	2	0	3	0	0	1	3	3	1	2	2
Malianwala	1	2	0	3	6	0	1	3	1	1	1	0
Patto Hira Singh	1	3	2	3	5	4	1	2	2	1	1	0

Source: DH&FW in respect of test-checked districts

R= Required as per IPHS 2012 norms; SS= Sanctioned Strength; PIP= Persons-in-Position

Colour Code:

	Dark green colour denotes 'excess manpower'
	Light green colour denotes 'least shortage'
	Yellow colour denotes 'moderate shortage'
	Red colour denotes 'most shortage & non-availability'

It is evident from the above table that:

- In five PHCs (Bhai Rupa, Jodhpur Pakhar, Possi, Thatti Bhai and Mallianwala), no Medical Officer was posted against the sanctioned posts as well as IPHS norms;

- In three PHCs (Jodhpur Pakhar, Otalon and Mallianwala), not even a single Staff Nurse was posted against 10 sanctioned posts and against 9 posts as per IPHS norms whereas in PHC Sanghol, one excess Staff Nurse was posted against sanctioned posts and two were posted in excess against IPHS norms;
- No Pharmacist was available in PHCs at Jodhpur Pakhar and Nanowal;
- No Lab Technician was available in nine PHCs;
- PHC Jodhpur Pakhar was non-functional due to non-availability of Doctor, Staff Nurses, Pharmacist and Lab Technician.

2.5.5.2 Government Medical College and Hospital (Rajindra Hospital, Patiala)

The number of sanctioned/filled posts of Professors/Associate Professor, Assistant Professor, Staff Nurse and paramedical staff as on 31.03.2023 in the test-checked tertiary care institution is given in **Table 2.17**.

Table 2.17: Position of staff in Rajindra Hospital, Patiala

Sr. No.	Cadre	Sanctioned Strength	Persons-in-Position	Excess (+)/ Shortage (-)	Percentage of shortage
1.	Professor	78	46	(-)32	41
2.	Associate Professor	92	36	(-)56	61
3.	Assistant Professor	160	92	(-)68	43
4.	Staff Nurse	1,200	965	(-)235	20
5.	Paramedical Staff	454	237	(-)217	48
Total		1,984	1,376	608	31

Source: RH, Patiala

Colour code:

	Yellow colour denotes 'moderate shortage'
	Green colour denotes 'least shortage'

In RH Patiala, overall shortage of medical and paramedical staff was 31 per cent, ranging between 20 per cent and 61 per cent in different cadres, as on 31 March 2023.

Due to shortage of staff, the delivery of health services in the test-checked health institutions was hampered as several such cases have been highlighted in this Report, as detailed in **Table 2.18**.

Table 2.18: Details of services hampered due to shortage of staff

Sr. No.	Impacted Service	Para reference
1.	Non-availability of speciality OPD services in test-checked health institutions due to non-availability of Specialists	3.1.1, 3.1.2 & 3.1.3
2.	Number of OPD cases per doctor were uneven in selected health institutions	3.1.6

Sr. No.	Impacted Service	Para reference
3.	Non-availability of In-Patient services	3.2.1
4.	Operation theatres were not functional in some test-checked health institutions	3.2.6
5.	ICU services were not functional in some test-checked District Hospitals and Rajindra Hospital, Patiala	3.3.4 & 3.3.4.1
6.	Non/Short implementation of Pradhan Mantri Swasthya Suraksha Yojana at GMCH Patiala due to shortage of staff	4.5.2.4
7.	Non-installation/functioning of equipment/machinery for treatment of cancer patients due to shortage of staff	4.5.2.5
8.	Some Health and Wellness Centres (HWC) were not operational due to shortage of staff	5.4 (A)
9.	Shortage of manpower in upgraded HWCs	5.4 (B)(ii)

The reply of the State Government was awaited (February 2024).

2.6 Future availability of Doctors and Paramedical staff

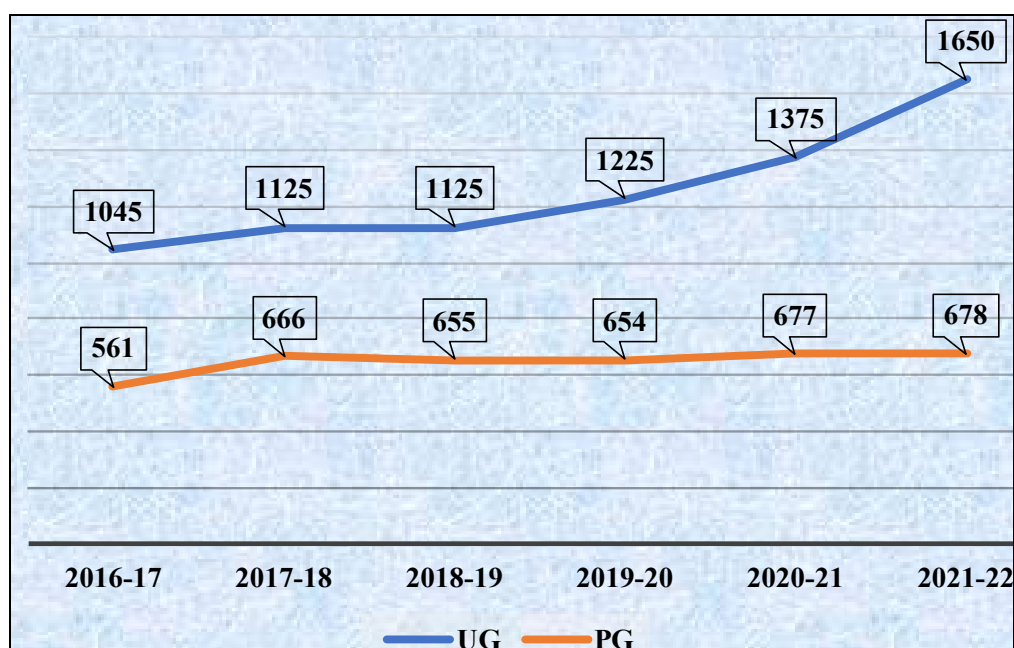
Public health in the State was suffering from persistent shortages of Doctors/Specialists, Nurses and Paramedical staff during 2016-2022, as discussed in the preceding paragraphs. Therefore, structural policy initiatives were required to address the substantial shortages, as suggested in NHM Framework 2012-2017. The position of availability of medical seats in the State was as below:

2.6.1 Availability of Undergraduate (UG) and Postgraduate (PG) seats in the State

2.6.1.1 Medical seats

There were 1,650 MBBS seats (700 seats in four Government Colleges and 950 seats in six private colleges) in the State as on 31 March 2022. In addition, a total of 678 PG seats were available in the State (379 in four Government colleges and 299 seats in four private colleges). The position of UG and PG seats during 2016-2022 is shown in **Chart 2.11**.

Chart 2.11: Availability of UG and PG seats in the State as of March 2022



Source: Departmental figures

Despite having 1,045-1,650 MBBS seats and 561-678 PG seats during 2016-2022, there was still a shortage of Doctors and Specialists in all the public health institutions, as observed in **Paragraph 2.2.1.4**.

Further scrutiny of information related to recruitment of Doctors revealed that 33 *per cent* Doctors who were recruited had not joined the Government services, i.e. only 1,988 Doctors joined out of total 2,965 Doctors recruited during the period 2016-17 to 2020-21.

2.6.1.2 Nursing seats

Notwithstanding a total 9,384 nursing seats³⁴ available, shortage of 3,415 nurses was noticed as on 31 March 2022, as discussed earlier in **Paragraph 2.2.1.2**.

2.7 Conclusion

Human resources, an essential resource for health management, witnessed persistent shortages in all cadres in the health institutions. Government has not ensured availability of posts in the health sector considering that the sanctioned posts were not commensurate with the population to be served, thereby adversely affecting health services. This shortage was quite high in several key posts such as Doctors, Staff Nurses, Radiographers, Pharmacists, etc. which play a very important role in delivering comprehensive healthcare

³⁴ UG-495 seats in 12 Government nursing colleges and 8,400 in 186 private nursing colleges, PG-55 seats in two Government nursing colleges, 434 seats in 24 private nursing colleges.

to the beneficiaries. Moreover, available manpower including the crucial manpower has not been distributed uniformly across the districts.

2.8 Recommendations

Government should devise a comprehensive HR Policy for medical personnel of all cadres of Doctors, Nurses, Paramedics including recruitment, deployment, etc. and accordingly may:

- (i) consider revising the sanctioned strength of Health Departments at par with the IPHS norms;*
- (ii) consider posting of staff in health institutions at par with the sanctioned posts in the primary, secondary and tertiary healthcare institutions;*
- (iii) consider rationalisation in posting of existing staff across districts and health institutions. While rationalising, it should be ensured that the postings are done in such a way that complimentary healthcare professionals i.e., doctors, nurses, paramedics, technicians and other support staff are posted in each health institution. Availability of infrastructure and other crucial components should be considered during such rationalisation;*
- (iv) focus on expediting recruitment process in order to fill vacancies; and*
- (v) incentivise Government Doctors to encourage medical students to join Government service.*