Report on the visit of
Pieter van den Hombergh & Niek de Wit to
Mr. Jain, chair of the Shri Madan Lal Puran Devi Jain Trust
and their Health center

Opening of the Jain Health Center in 2021

Structure of the report

- **Summary**
- **Background.**
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- **Positioning of the Jain Health center**
- **Conclusions and SWOT analysis**
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Summary

From 15 October till 25 October 2022 we (Pieter van den Hombergh & Niek de Wit) visited the project of the Jain Trust. After a warm reception by Mr. Jain, representative of PUM in India. We were guided and had a warm reception by him and stayed in the Amritsar Service club.
The Shri Madan Lal Puran Devi Jain Trust is running a health center in Jandiala for a year now. They wanted advice from PUM on the way forward for the center.
Jandiala is an area of ± 100.000 people including surrounding villages and only commercial health providers are active in that area. The Jain center wants to offer affordable care to them.
The center is offering services almost free (30 rps) compared to the fees of the many private providers in Jandiala and gives free medicines for 2 days. We met with the staff and also visited schools, an agricultural research center and comparable NGO-led centers in Amritsar. We extensively talked to trustees and volunteers in the health camp.
Our conclusion is that the center made an impressive start, is supported by the community, is situated in excellent premises with good equipment.
However, there is underuse of Lab and physiotherapy and the amount of patients for consultation could increase. Based on our findings we recommended for the short term:
1. A mobile friendly appointment system Involving the receptionist and having a handsfree phone system with the option of ICT connectivity.
2. An electronic patient registration system supported by the staff
3. Disease specific health days. For e.g. DM, hypertension & orthopedics in the health center
4. Focus on improving medical leadership for the steering and supervision in the center.
5.Tailoring the services to the health needs of the population.
For the middle & long term
1.Collaboration with the private sector with a focus on secondary care and on the prevention of shopping behavior of patients.
2. Improving pre-/post-consultation health information + e-health integrated in the website.
3. Continuing the network between Jain Trust, PUM and Dutch Embassy/ government and when needed help with equipment.
The support from Jain, the commitment of trustees and the staff was impressive.
We look back on a very fruitful, pleasant and relevant mission.

Background.

First contact with PUM

The PUM was approached in 2019 by Mr. Jain from India just after COVID paralyzed all travel.
The Shri Madan Lal Puran Devi Jain Trust organized regularly successful “free of charge health camps” near Amritsar in India. Covid made these camps impossible.
Jain saw the possibility to switch to offering a more permanent provision of health care to the people of Jandiala Guru, where the foundation has its roots.
He asked PUM if they could help. Pieter van den Hombergh & the PUM medical team was asked to support this initiative. We helped to make a projectplan that would allow to run a sustainable health centre yet offering affordable free care.
Part of the projectplan was to approach Medic to furnish the health center with equipment and medical furniture. The health center itself was paid with already existing funds of the Jain Fund.
Then COVID threatened to spoil all our plans.
We requested Medic (Auke de Vries en Arie van Oosterwijk) and started to select available equipment and medical furniture. Medic hammered the boxes and arranged the transport to India.
The ingenuity of Medic made this all possible in spite of COVID.

Through PUM we asked the Hans Blankert Fund (HBF) to sponsor the transport and some of the equipment that Medic provided for rock bottom prices.
The opening of the health center would be in July, but was postponed till 17 September2021.
PUM hoped to allow me and Leon Husson to attend the opening and participate in a planned seminar with the staff on practice management and future organisation of the center. But India had become impossible to access.
Jain invited the Dutch Ambassador in Delhi Marten van den Berg to open the center in July 2021. He was enthusiastic and saw the valuable contribution to rural health care. This was the start of structural contact between the trust and the Dutch embassy in India.
It was the merit of the Jain Trust initiative which contributed to Universal Health Coverage (UHC) for a population that had limited access to proper care.
The center has started to see patients and the interior seems to be really well equipped and potentially offers comprehensive primary care, that will make many hospital visits unnecessary.
The total costs of the equipment including boxes and transport were € 5000,- were covered by the donation of The Hans Blankert Fund (HBF) of the PUM. The list comprised of: 1 ECG; 2 otoscopes; 2 RR meters; 2 Stethoscopes; 1 suture set; Ultrasound Therapy; IF Therapy; Muscle Stimulator; 8 Treatment Tables; 1 Non-contact Tonometer; 6 Chairs/ tabourets, 6 examination tables.

Follow-up visit

After the successful first contact Mr. Jain requested PUM for a follow-up consultancy by Dutch medical experts to assess the present functioning and the future potential of the center for the health needs of the community.
On behalf of PUM dr. Pieter van den Hombergh and dr. Niek de Wit, these senior medical experts with long experience in primary care both in Holland and in other countries travelled to India in October 2022 for a 8 day mission.
Aims and objectives of this visit were :

- To assess the present functioning of the center and room for improvement
- To recommend on a sustainable future of the health center and the steps to be taken to implement this

Day to day report of the visit.

Day 1.

We were collected at the airport by Mr Jain personally and invited to his house for an Indian meal. The evening we were invited at the 100 year anniversary of the Amritsar Service club, which was also our hotel for the week.

Day 2.

We were received with honor on the day of the first anniversary of the center.
Jain had together with the staff of the health center and community members organized a celebration that included a so called ' health camp' where patients with new complaints could consult general physicians and specialists free of charge.
He also invited the member of parliament in Amritsar Jasbir Singh Gill and Marcel Floor, assigned Counselor for Health, Welfare and Sport of the Dutch Embassy in Delhi.
It was a day full of joy and positive spirit. Nearly 2000 patients turned up in a hall opposite the center, to be helped and 4427 different types of treatment were given.

Key activities during the Health Camp day

1. Health education on cancer by the Indian cancer Society, on high [prevalent cancers like, breast, cervical and colonic cancer
2. Triage in symptoms by community health workers
3. First check by general physicians
4. Specialist consultations in orthopedics. Eyecare, cardiology and ENT

These patients were seen by the following specialists (who all worked on a voluntary basis)s:

- 1290 patients for eye consultation
- 90 patients for ENT
- 412 patients for Dental consultation,
- 24 patients for cancer prevention
- 636 patients for General medicine consultation of which 115 had EKG
- 350 patients for orthopedics
- 140 patients for Cardiology
- 530 patients for Hypertension measurement
- 630 patients for Blood sugar measurement

The many patients lining up for the specialties

The cooking for 2000 patients

The volunteers and community members beig addressed by the organisers and guests

The cancer prevention section

The longest row was for General medicine

All physicians worked on a voluntary basis on their free Sunday , demonstrating the broad support and altruism of these health care professionals.

The ENT specialist explained us how the Indian government is using its resources: basic ENT services provided by primary care health workers (most prevalent is otitis externa). These are not adequate in regional hospitals. Cochlear implants (30.00 US each) are only provided in 2 hospitals, and only for children with congenital deafness. People will have to go to private doctors for this expensive care.

The district Community Health Workers supervisor with general medical service available for all through the division of the district in 9 blocks, each block covering 5-20 villages. Each block has a responsible community health worker, social workers and primary care physician.

It was quite remarkable how well organized Mr. Jain had prepared the event and had gone to great length to not forget to thank any of the volunteers. We got a good impression of many of the health problems and the difficulty in dealing with the overload of cases presenting and the problem of sticking to Evidence Based Medicine-standards.
We had interesting discussions with the general practitioners, the ENT doctor, a cardiologist, but also community workers and preventive health educationalists for cancer awareness, with pharmacists and dentists.
We met many people among which the president and the representatives of the Jain Trust, the Lion's club as well as the municipality and the community.
The opening was done by Mr. Jasbir Singh Gill Member of parliament. Lots of volunteer took care of the organisation, catering , food and presents for all the people who sacrificed their Sunday for this purpose. Special mention was made of the contribution of the Hans Blankert fund in the equipment and realization of the center. (see pictures)

Thanking to PUM & the Hans Blankert Fund
Besides a plate with the PUM consultants

Welcome also to the MoP Jasbir Singh Gill,
Dutch embassy Consul M. Floor and advisors.

The eye doctor examining a patient

Cueing for the consultations

This clarified for us the specific structure and governance of the Indian healthcare system, in which government hospitals , the private sector and charity based institutions together provide healthcare services to the community. This is done in a delicate equilibrium between public and private interests , based on mutual respect, altruism and professional collaboration on the one side, but also on competition and marketing on the other side. Charity based health care institutions are typically started by well-to-do families who – from a religious obligation to contribute to the population- initiate healthcare facilities based on funding of the building and logistics, and part-time medical professionals. These professionals are commonly either retired or early career physicians, or private doctors who work parttime in the centers (2 -4 hours a day) besides their own practice. There is a lively patient flow between these charities and the private care institutions and the government hospitals.

Mr. Jasbir Singh Gill, MoP, Mr. Jain and the guests

speaking for the audience and the press.

Many volunteers were honoured for their contribution

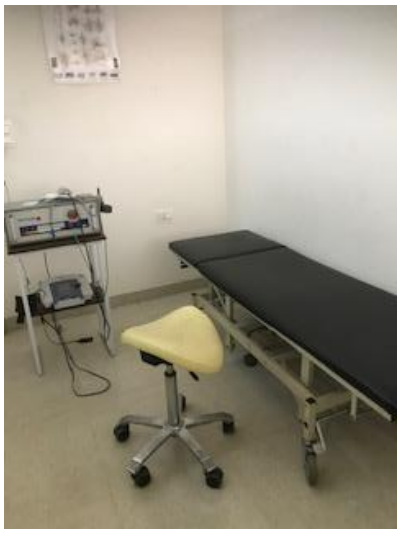
Mr Malhotra and Jasbir Singh Gill in the eye room

Day 3.

We met with the staff of the Jain health Center and were shown around in the laboratory, physiotherapy, and general medicine consultation room.

Physiotherapy department with hot packs, IFD and Ultrasound wave applications.
The IFD and the ultrasound therapy were out of order even after having been repaired.

IFD and Utrasound



All the benches donated by PUM

Frozen shoulder was a frequent problem

After that we discussed the present and future plans of the Health Center with the health centers governors, Mr. Jain and Mr. A.S. Malhotra.
That helped to position the center and make a SWOT analysis. (See later)
We promised to contact Medic on replacing the two devices. IFD and Ultrasound.

Day 4.

We had a discussion at the health center with Mr. Malhotra (a senior advocate who is fully involved in the management of the center on a voluntary basis) on his ideas to offer programmatic, more preventive services. People should be invited for dental, eyes and other checkups on specific days when expertise was available. He also wanted to collaborate with schools to increase health awareness amongst the youth in the community, and to provide low access medical services to school children. To see this potential in practice we visited the Soldier private school in Jandiala Guru, which offers preschool, primary and secondary school education in the community

The reception was overwhelming as was the sightseeing of the premises. Many play grounds and sport facilities. See pictures including chemistry class and botanical garden).

The school was for all ages up to 18 and the yearly fee was between 30.000,- and 40,000,- rps, with no government grants.
Impressive facilities for chemistry, physics, library etc. The school had a botanical garden with common vegetables for instruction and even a dispensary. The school impressed as very hygienic and the illness related absence was reported to be very low. The school offered free of charge health care services, but these were very basic. Incidentally health education talks were part of the early morning gatherings of the school.

When asked individually, students did not report COVID or Dengue. When asked, occasionally typhoid was found. No report of diarrhee. Pupils had anthelmintics yearly. Eye problems were more frequently reported. The staff told us that in Indian culture the smoking, drug abuse and alcohol use in the school age is infrequent, and at this moment zero pupils were ill nor had a major health issue . Sexual education was reported to be given , but preventive health education on healthy diet and exercise was not provided on a structural basis.

Our conclusion was that the dedication and zest of the staff was impressive, and that the students were very committed to school and education. Although this impressed as a 'healthy school' we think that collaboration with the Jain center could further improve this status, by both offering free service to the students with complaints in the centers, and by the joint provision of health education programs, online as well as in teaching sessions.

Visit of the Jain center for discussion with the staff

In the afternoon we returned to the center to have 1-1 discussion with the staff about their evaluation and recommendations for the center .
We spoke to

1. Mr. Sahil Sharma, who is closely related to the Jain family and associated with the operation of the center as volunteer. He is committed to the cause of the trust. Together with Mr. Malhotra they are driving forces in the daily management of the staff.
2. The staff is paid modestly monthly according to their qualifications and activities. The running costs of the center are 2.500.000 rps per month (± € 30.000,-). About 70% is now covered by Jain foundation. The rest comes from registration fees, contribution from the community and relatives.
3. Dr. Res Raj, who served as a doctor in the government for 35 years. As a GP he is happy to treat patients that come in and to help with the existing facilities or he refers.
   Colleagues are the ophthalmologist and orthopedic surgeon, but they do only have 1-2 half days surgeries. The gynecologist had to leave the staff unfortunately due to other obligations. Dr. Res worked at home with a computer and had no objection against an appointment system and a patient registration system.
4. Lab technician Jasbir Kaur was asked to tell about her ambition with the lab. She did not ask for more diagnostics, but reported that the lab was underused and could handle more patients. She was happy to have a patient registration system and was aware of software to enter lab data.
5. Receptionist Aman. She registered the patients and handed out the drugs. She would not oppose to an appointment system as long as direct access was also possible.
6. Physiotherapist Dr. Jaskaran Preethaw. She was not happy with the Interferential Diathermy equipment that did not function after being repaired. (see picture). We promised to contact Medic on the problem and see if new equipment could be sent.
   She would like to offer these therapies and had the qualifications for it. We asked on how the collaboration was with the ortho-department of the hospital or the physiotherapist.

Up to date eye equipment in the center

Mr. Res Raj GP taking bloodpressure

Day 5.

Visit to the ***Krishi Vigyan Kendra, Guru Angad Dev Vet & Animal Sciences University***

We were received by Dr Balwinder Kumar and his staff. We got an excellent introduction in the highly scientific research they did in micronutrients (Zinc, Iron, Mangan, Iodine, etc.) and their intervention to improve the veterinary health status and ultimately the people.

They had discovered high anemia rates amongst children (60%) due to iron deficiency. We learned a lot about circular agriculture and farming, progressive farming, not burning of manure/ straw, enriching the soil with nitrogen, phosphate and calcium. Also chickenpox and lumpy cow disease was addressed. We got a visual demonstration and discussed the one health concept, that the Jain center is supporting.

After this introduction we had a constructive discussion with the staff and representatives of the farmers. This was very instructive. We answered questions of individual farmers and spoke to them.

Further interviews with staff in the health center

After the birding at the river for an hour we went back to the health centre, where we continued our discussion with the staff. We spoke with Dr. Heena; eye specialist.
She was now working from the last 3 months in the center. She had many patients, so clearly there was a need. She could only examine the anterior chamber and not the fundus, but she could help most patients.

During the day we discussed many options with Mr. Jain. He was worried because of the underuse of the physiotherapy and the lab. He looked with at ways to improve on realigning the rooms to be able to treat more patients at one time. He also had made 20.000 leaflets to be spread in the villages to make the low threshold access to FT clear.
But another reality may be that the FT-service is just too much for this population. We agreed that exercise instructions and coaching needed attention.

Another problem was the absenteeism of the staff after 1-4 o'clock pm. Who should feel responsible for their presence? We discussed the absence of medical leadership and the difficulty to find a GP or medical professional, that could pull things of.
We agreed that the underuse of FT and Lab needs to be addressed. The fantastic comprehensive labservice (Live, kidney, HB, Blood cell count, urine and other tests) asks for a much larger patient population to utilize the lab and center. Such a lab could serve more than 10.000 patients.

Day 6. Thursday

After a wonderful breakfast with puri (bubble chapati's) we had a discussion with Jain, his son Yogeesh and grandson Sunny (trustees) and later with his brother Sahil Jain on the possibilities of e-Health and ICT for the health center and to make it mobile phone friendly.
They are all involved in the Jain trust and very committed to continue the work of their father, which may be soon, since Jain Sr. is growing old. All of them are involved in private IT business on software and administrative accountancy systems, and can be considered as experts on IT in India.

We discussed the following topics : electronic patient record system, electronic appointment system, digital health education and future collaboration on the Jain center as a pilot for data and an E-based learning Healthcare System

1. There was remarkable consensus on the desirability of having an adequate ICT surrounding in the health center to facilitate both the appointment system, the administration of patients, medical record keeping and integration with other services (FT, Lab, Eyes, ortho). We discussed that a timely prudent choice of the right software for the Jain center was crucial. It should be a Primary Health Care oriented system, to also warrant good follow up, listing patient with chronic diseases for follow up (Diabetes, Hypertension, etc.), connection to Family Medicine guidelines and e-Health. Also patient information (printout of diagnose related information) or instruction films should be available and be used in the center using screen projection.
2. We also touched upon the need for an appointment system, preferably internet based and linked to the electronic health system. Initially this appointment system could work alongside the present 'walk in' system, but in future it should completely replace it. The advantage of an appointment system is that it would facilitate a more efficient use of staff and resources during the day, but also make it possible to link newly booked consultations to previous ones. It was obvious for everyone that this consultation system should preferably be linked to the website, so that patients can book themselves.
3. Regarding health education, everyone agreed upon the urgent need of health education programs for the target population of the center (100.000 catchment area). Better education and communication will stimulate understanding of their affliction, consultation behavior and self-management by future patients, thus optimizing patient flow in the ecosystem in which the health center operates. Therefore, preventive health and lifestyle programs and health education programs on the most prevalent diseases should be offered by the center. Regarding the electronic format we realized the challenge given the low ICT-literacy rate of the population and the present low mobile phone access. However, this may change rapidly in the near future. We concluded that a two tier system would serve the people best with both health education in a one-to-one format as well as electronic health education in local language through the website of the center
4. Finally we discussed the potential of the Jain center to act as a pilot environment for a Learning primary care center. The catchment area, the IT based background of the trust board members and the collaboration between private public authorities could create opportunities for this. In this concept the Jain health center would in the near future be expanded, both in variety of professionals as well as in physical space, and would need to be digitalized in a up speeded process. Data gathering, monitoring and AI-based analysis would need to be the center of this development as well as optimal use of technical medical solutions in diagnostics and therapy. This as a point on the horizon.

Additionally we discussed the website that is under construction and trustee Yogeesh Jain showed us a print out of a first draft of the website. That helped but would need a service module to enable patients to contact or make appointments.
We also spoke about the relevance of the electronic patient system for accountancy and drug stock control, the financial possibility of booking each consultation and having financial surveys. This is relevant for the sustainability of the center. Centers in Amritsar have higher fees, which should be avoided. Also the possibility of having a yearly subscription to the center with an additional lower fee per consultation was discussed.

For the implementation of such a ICT-surrounding as well as in general for the medical ambitions of the center there was consensus that additional medical leadership was needed.
Someone with a medical background should have the authority to stimulate the implementation of ICT and the coordination and steering of the various medical professions. Her medical background (nurse, physician?) could help to set priorities and propose innovation and quality improvement including expansion of services.

We then set out to visit 2 comparable but much more advanced medical centers in Amritsar: Sewa Samiti and Dalmia (see pictures also for their services).

For us the visit and the helped to understand how NGO's provided affordable health care in Amritsar. The benefactors were visible. (see picture of the founders). Jain proposed having crowd funding by donors offering e.g. 1000 rps a person.
The NGO construction is helpful for rooting in the community.

An eyeopener was that the basic structure of the centers was quite similar to the Madan Health Center of the Jain trust. (see pictures of Sewa lab service & EKG).
Informative was that they had many options that are future possibilities in Madan. Similar were the

FT-sections, lab and consultations.

Free Legal advice would be an asset for a poor rural community

Psychological help

Skin diseases/ dermatology

Diet and wellness

Radiology facilities

Temporary admission beds

One center was fully computerized (Dalmia) and the other not at all. We asked the manager of Sewa what the reason was for not using ICT. It was the investment and maybe because no one felt the urge to change.
Other possibilities for a center to become more relevant to the health of the population were: offering minor and even major surgery (Dewa), Internal medicine and if in high demand alternative medicine.

Finding an optimal business model to match income (funds, donations, fees) against costs. Other NGO health centers can be a source for inspiration and information.

Day 7.
We worked on the report and visited the Amritsar golden temple.

Day 8.

Visit of the Jain Health care center and discussion with the staff on our recommendations.
It was quiet at the center due to Diwali festival. All staff was given presents for Diwali by Jain and we briefly spoke to them. The physiotherapist, when asked, said that they would like a visit from a Dutch physiotherapist consultant in a next mission.
We informed if the staff had meetings. In the past yes, but the staff is not involved in the strategic planning for the future nor do they have any ownership even for the day to day running of the center.
We strolled through Jandiala that has a big market. Interesting was that many medical services were offered there (Dental, Lab testing, Physiotherapy. So The Jain center is operating in a competing market. Jain said that these care providers often were not qualified. Also private doctors prefer their own lab testing facilities, because they often get money for referring patients.

Day 9.

We checked the report with Mr. Jain at his house with all the fantastic hospitality and food.

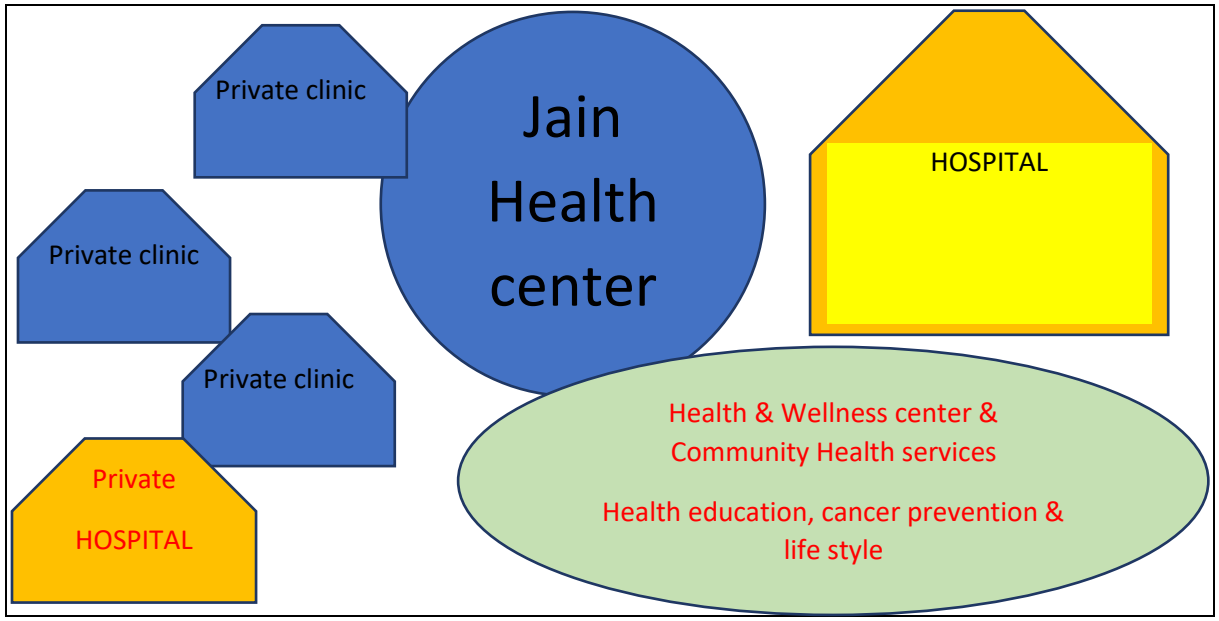
Positioning and SWOT analysis of the Jain health center:

Aim and OBJECTIVES of the health center

- To provide integrated affordable primary care, serving the needs of the population
- From a sustainable health care system that is fit for the future
- In collaboration with and complimentary to the community health and wellness centers , the private sector and the secondary care facilities

SWOT and analysis of the position in the health care system

Present positioning of the health center between other providers



Selling points of the center

- Easy accessible through very low fees
- Trustworthy and excellent embedding in the community
- Good Lab facilities and good eye- and physiotherapy Equipment present
- Free drug provision for the first two days

Challenges

1. Present appointment system is not adequate: patients predominantly present in the morning and in the afternoon facilities are underused.
2. Present patient and medical registration system is traditionally, by hand in logbooks; which blocks communication between care providers and hinders long term follow-up of patients.
3. Collaboration between the Jain center and other private centers and pharmacies is driven by competition, the health center is regarded as financially competing with their interests.
4. The health center does not yet have a dedicated health education program preceding the visit and the visiting patients are highly illiterate and have low health competencies.
5. The collaboration with specialist care is dependent on voluntary and individual contributions of specialist working in government or private hospitals
6. For expansion in medical services and comprehensive diagnostic and therapeutic services for non-communicable diseases (chronic conditions) more medical leadership is required.

Conclusions and recommendations

Recommendations

For the short term

- **A mobile friendly appointment system** Involving the receptionist and having a handsfree phone system with option of ICT connectivity.
  Since all patients do have a cellphone it may be possible to install an appointment system, in which patients make a 'on the day' appointment with the general physician, lab, physiotherapy or eye / ENT-doctor. Two patient streams could be created : one consisting of patients entering the health center, and one of those making ab appointment. The first stream should be discouraged by prolonged waiting times**.** The electronic appointment system could be attached to the website of the center, which is presently under construction
- **To implement an electronic patient registration system** in which the basic details of all patients are entered allowing follow-up of medical results, financial and management activities are recorded for all visits to the clinic. It would be preferrable to use an existing primary care patient registration system . Efforts have to be made to find out which system is the best choice. Advice should come from the department of Family Medicine in the university.
- **Disease specific health days.** Health camps serve the objective of low threshold care for many patients, and are an excellent way to increase the visibility of the health center but need to be provided in a more focused manner. Given the high prevalence we suggest to focus on single disease health day camps for diabetes, hypertension and orthopedics in the health center itself. The WHO has such days which could be followed.
- **Focus on improving medical leadership for the steering and supervision in the center.** Without leadership implementing ICT, supervising staff and innovating and improving care as well as expending services to provide more comprehensive services. That would make the center more medically relevant and attractive to the population.
- **Tailoring the services to the health needs of the population.** That could result in expanding services (Gyn/obst, dermatology, Dietician, Dental, Psychological help)
- **Ask advice on physiotherapy** from PUM, which could possibly change the services (more exercise instruction instead of physiotherapy with equipment). Presently physiotherapy is more on passive treatment than on activation of the patient.

For the middle & long term

- **The collaboration with the private sector and government/ private hospitals** needs to focus on secondary care and on the prevention of shopping behavior of patients. This could be organized in structural collaboration with the hospital patient referral and specialist consultation
- **Improving pre-and post-consultation health information:** analogue to similar developments in other health care systems (www.GPinfo.com (NL) or use the UK-site of the NICE institute) we recommend to design a health information package focused on local cultural conditions and circumstances or to use and existing system that can be adapted. Given the low literacy of the target population, this health education needs to be predominantly visually provided, be provided in Hindi/ Punjabi and focus on the 20 most prominent complaints and diseases. It could be attached to the webpage of the center. The E-Health could be integrated in the website.

- **Future collaboration between Jain Trust, PUM and Dutch government.**

The Dutch health care system is facing several challenges regarding affordability and staffing, and there is an urgent need to adapt the present system to future demands. This transition focusses on the development of E-Health, the development and production of drugs (30% of our generic drugs are presently produced in India) the use of technical diagnostics and therapeutics and the development of so called 'learning health care systems' . This requires transition in design, positioning . That implementation of healthcare changes is universally important, but needs to be adapted to local context , resources and culture. Because of the global context of the challenge the Dutch Ministry of Health has initiated contacts at Embassy level in Washington, Peking and Delhi. Systems and nations have a shared interest and can learn from international exchange and joint implementation.

An important aspect of the required healthcare transition is the introduction of digitalization, artificial intelligence in healthcare, E-health solutions and the development of locally adaptive learning health care systems.

In a LHCS the development of health care provision and quality of care is continuously positioned according to the actual needs, by closely monitoring all currently available health care data, health outcomes and the development of predictive tools. The introduction of pre-consultation digital health education, health communication and self-management is an essential part of this, as this will limit the future burden on existing healthcare facilities. In the LHCS all kind of technical applications are needed to optimize the system : data science to analyze the developments, AI based algorithms to improve risk prediction and diagnostics, medical technology to improve the diagnostic process. This required close collaboration between the staff, knowledge institutions like universities and the private sector(medical industry and drug companies)

To develop and evaluate LHCS local pilots in primary care laboratories are needed, with a substantial volume to facilitate evaluation.

We think that the Jain health center has the proper infrastructure and scope (40.000 catchment area) to act as a primary health care laboratory in the Indian society. we therefore recommend explorative discussions between the Trust, university, government and the relevant companies from Dutch and Indian side (Philips …) about the conditions and format of such a 'primary care development lab'. The Embassy and PUM could play an intermediate role in this.

Diseases	**Activities/Procedure** **At the Healthcare center**	**Doctors / Faculty**
Health & General Medicines G.P. related issues	Checkup/ Consultation / Treatment Clinical Tests ECG etc. Child Care Immunization/ Gyne	**Dr. Des Raj** MBBS (General Physician) **Dr. A. Sharma** MBBS (Child Care & General Med)
Orthopedic	Checkup/ Consultation / Treatment	**Dr. Manpreet Singh** MBBS, MS (Ortho)
Physiotherapy	Physiotherapy (complete) Treatment	**Dr. Sandeep Singh** BPT, MIAP, CDNP (Physiotherapy) **Dr. Jasker Preet Kaur** BPT
Artificial Limbs	Checkup/ Consultation	
Eyes	Checkup/ Consultation/ Treatment Spectacle	**Dr. Pardeep Arora** **Dr. Heena** (Eye Specialist)
ENT	Checkup/ Consultation / Treatment Hearing Aids	**Dr. P. Chaudhary** MBBS – MS (ENT)
Laboratory	Clinical Tests ECG etc.	**Dr. T. Bhasin Advisor** **Lab Technician Jasbir Kaur** MBBS – MD (Pathology)

We thank all of the people involved from the Jain trust, Medic and PUM/ HBF for making this possible. They are grateful to PUM and Medic for their contribution.

We will continue to collaborate with the team through remote coaching in practice management and organisation. That will strengthen the friendship.

Dr. Pieter van den Hombergh & Prof. Niek de Wit