

An Approach towards Integrated Healthcare System in Punjab, Pakistan

Guest Editorial

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Government of Punjab (Pakistan) in 2016 segregated the Healthcare Sector into two tiers of Specialized and Primary & Secondary healthcare departments, to benefit and advance long deprived Primary & Secondary health structure in terms of policymaking, budgeting, prioritizing need-based interventions, and winning grants; establishing both departments as independent functional units with execution power of finances. Specialized Department constituted of tertiary care hospitals and medical education institutes whereas Primary and secondary health care department took hold of not only primary and secondary health care facilities like basic health unit, rural health centers, dispensaries, mobile health units, tehsil, and district headquarter hospitals but also all vertical programs; communicable disease programs, non-communicable diseases, national immunization program, etc. under the umbrella of Directorate General of Health Services. The 2020 initiative directed focus on South Punjab and we see a separate health system emerging for South Punjab with the perspective of concentrating on the most deficient and frailer region of Province Punjab at priority.

Previously mostly efforts were unfortunately made towards the betterment of Tertiary care health services to provide relief to the public without relieving the pressure from the bottom in terms of undue referrals and unjustified minor health issues Outdoor Patient Department and Emergency. Even Indoor Patient Department cases were the majority of the matter that should have dealt with in the Primary and Secondary care facilities. This was the major reason for the failure of all the efforts previously made. According to researches, the bottom-up approach is always beneficial and proves prolific upshots when it comes to healthcare. However, over the past 5 years, District Headquarter Health Facilities were improved but still, the bottom-up approach had to be initiated from the very basic health care level. Instances like "Sehat Gah, Sehat Ghar, Sehat Kahani" projects are some of the success stories

taking place at the primary level, which were not only innovative but also proved productive.

The main problem prevailing in the health system encountered while designing health policies is multiple pools of similar and irrelevant data. The bureaucracy seems determined for thorough data integration and to create an atmosphere of promoting co-dependency between various departments. However, a strong resistance exists in these sub-departments hindering them from merging or healthy exchange of information and thus preventing data sharing. They prefer to work in isolation not only with the

specialized department but also with their co-departments in the primary and secondary domain. All sub-department are running their operations at the level of their own pace severely lacking integration with sister departments. It can be narrated in a single phrase as "Too many streams flowing in the same direction with non-coinciding margins".

A health care model can embed integration of various health systems like functional, clinical, professional, normative services, also including integrated care pathways, clinical & administrative governance models, and integration of interventions and collaborative care models, etc.[1] Integrated information systems incorporate health facility general information, management & database information system, programming, and resource utilization system, financial and procurement management, facility management, and human resource management systems.2 Integration in so many variant areas is a highly complex strategic measure as it is gradually accepted with a moral of "no one size fits all".[1-3]

Technical integration is required to merge various



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software for necessary data sharing transport to bring appropriate measures to high light all strenuous efforts of the health department. Presently, electronic medical record deployed by HISDU is running in Basic health facilities, mostly under the control of Punjab Health Facility Management Company, whereas different components of HMIS like Queue Management System, Prescription Management System, Complaint Management System, Electronic Medical Record, etc. are running parallel to each other in secondary healthcare facilities. The establishment of a comprehensive Health Management Information System connecting all outdoor, indoor, laboratory, radiology services is necessary to organize health systems administratively and clinically to create purposeful links at all levels of healthcare facilities. Hospital information management systems classified as integrated and modular systems are proven to be very beneficial in meeting the needs of healthcare professionals, administrators, and patients as well by collecting authentic, verily complete data, also in terms of reducing costs, enhancing patient & consumer satisfaction along with strengthening of internal communication networks.[2] This assembling and integration of data will facilitate health facilities in fulfilling their purpose rather than building a huge burden on Tertiary care facilities which in actual should be only running higher specialties; all Out Patient Department should be dealt in Basic Health Units and Rural Health Centers. Major specialties should be catered successfully in secondary health care facilities including medicine, surgery, gynecology, pediatrics, dental services, ophthalmology, ENT along with allied health services of nutrition, physiotherapy, psychiatry, etc. Similarly, chronic patient clinics like dialysis units, hepatitis clinics, Tuberculosis, etc. should perform their role to curtail this burden from tertiary care. If the segregation of specialty services happens we can have a rotation of Postgraduate residents at DHQ & THQ level hospitals to serve the requirement of their degree completion as well as there is an industrious circulation of specialties among two tiers of the health department. The General practitioner System should be strengthened and this practice should be encouraged as we see internationally that no patient can directly come in consultation with a specialist without recommendation or referral from the concerned General Practitioner. A strong referral system constitutes of proper guidelines of emergency and non-emergency referrals, justification of referrals by General Practitioner and attached complete patient

details.[4-5]

The government of Punjab should take revolutionary steps towards the establishment of a strong and sustainable system of healthcare that will not only be interconnected but also integrated into both horizontal and vertical ways with a specialized healthcare system. The health care structure should be evolved with the objective that the system should chase the patients rather than the patients chasing the health care system. Clinical governance and audit should be the key components for analyzing and continuously improving the quality and accuracy of services. The upcoming era in health internationally is Artificial Intelligence. Sometimes to bring a huge difference we need to think out of the box, maximizing risk in the trial of changing culture. The reviews mostly say that culture is mostly the hindrance between acceptability of new interventions but to rule at a bigger picture we need to broaden the horizon, maximize risk vulnerability and take revolutionary steps in dominating a culture among the masses. Implementation of the system should be well with proper planning, need assessment, finalization of equipment specifications, allocation of human resources, designating responsibilities, proposing extensive training to overcome deficiencies related to administrative and technical control.[6]

An integrated approach can bring us many steps closer to United Nations Millennium Development Goals. While harnessing information and communication technologies (ICT) for health requires planning at the national level, to ensure optimum utilization of available and limited resources. The benefits of digitalization of the health system have not been fully harnessed by Pakistan due to the lack of an enabling eHealth policy framework. eHealth policy maps out the national vision, goal, and strategy for rational introduction and application of ICTs for health and healthcare for maximum benefit. E-health system should also provide a vision and clear guidance to all stakeholders such as the public, patients, health professionals, and others. The presence of a clear national eHealth policy facilitates mainstreaming and coordination of eHealth applications by all planners and implementers (e.g. Government and donors), thus ensuring synergy and minimizing resource wastage at the Governmental forum. In Norway, ICT-based communication positively influenced coordination between primary and secondary care in terms of information exchange.[7] The technology specific to the Pakistani context can prevail successfully in addressing issues of low bandwidth while addressing patients on video calls.[8] Presently, a pilot project with the title "Sehat ghar" was

conducted in Lahore with the aim of replication in the Sahiwal district. The result was quite satisfactory in terms of patient's feedback when they were provided with special services at the periphery bringing ease of accessibility, considering the patient time and recurring cost valuable.

Despite the emerging digital world, incited by health-related technological advances, increasing economic investment, and culminating social and cultural changes, still it is quite challenging to incorporate eHealth from the periphery to the center of strategic health planning in a country like Pakistan. If a well-embraced integration is made possible at this level, further building blocks can be processed concerning them like home-based medication delivery, mobile diagnostic facilities can also be structured in a financially feasible model. Necessary integration can help in saving wastage of resources running in the same direction in different programs. Governmental support for entrepreneurship and a well-structured regulatory framework can promote cost-effective solutions for the smooth delivery of healthcare services.[9] Various healthcare integration projects when analyzed resulted that combining project management with change management is quite beneficial, the analysis of integrated health system in 24 countries characteristics showed better adoption of eHealth applications in countries with already having National Health Service (NHS) model, and also a positive trend is seen in decentralized countries showing benefits of improved care management however limited funds were a major hindrance in flourished outcomes.[10,11]

The healthcare integration strategy should endeavor to alter the notion of healthcare services from being process-oriented to result-oriented. It aims to expedite the process of primary healthcare services in Punjab through its remote nature. Necessary action and remedies in terms of digitalization of clinical services and vertical programs should be initiated and integrated at the grass-root level in a simpler way to help our workforce adapt to it amicably and it should not be presented as an additional burden to their present responsibilities. The model should be able to fix implementation and management hindrances such as limitations placed on the training, reimbursement policies as well as licensing requirements. This can be done in concordance with the establishment of the Data analytics and Proposal fundraising department. All healthcare facilities starting from basic OPD to Indoor admissions should be enrolled in HMIS. Clinical Governance can be planted based on HMIS. Vertical programs should be integrated with the

clinical services so that all reporting patients are automatically aided towards their respective programs. A Multi-Dimensional strategical approach towards achieving the fruitful outcomes of e-health and telemedicine is required to be adopted.

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