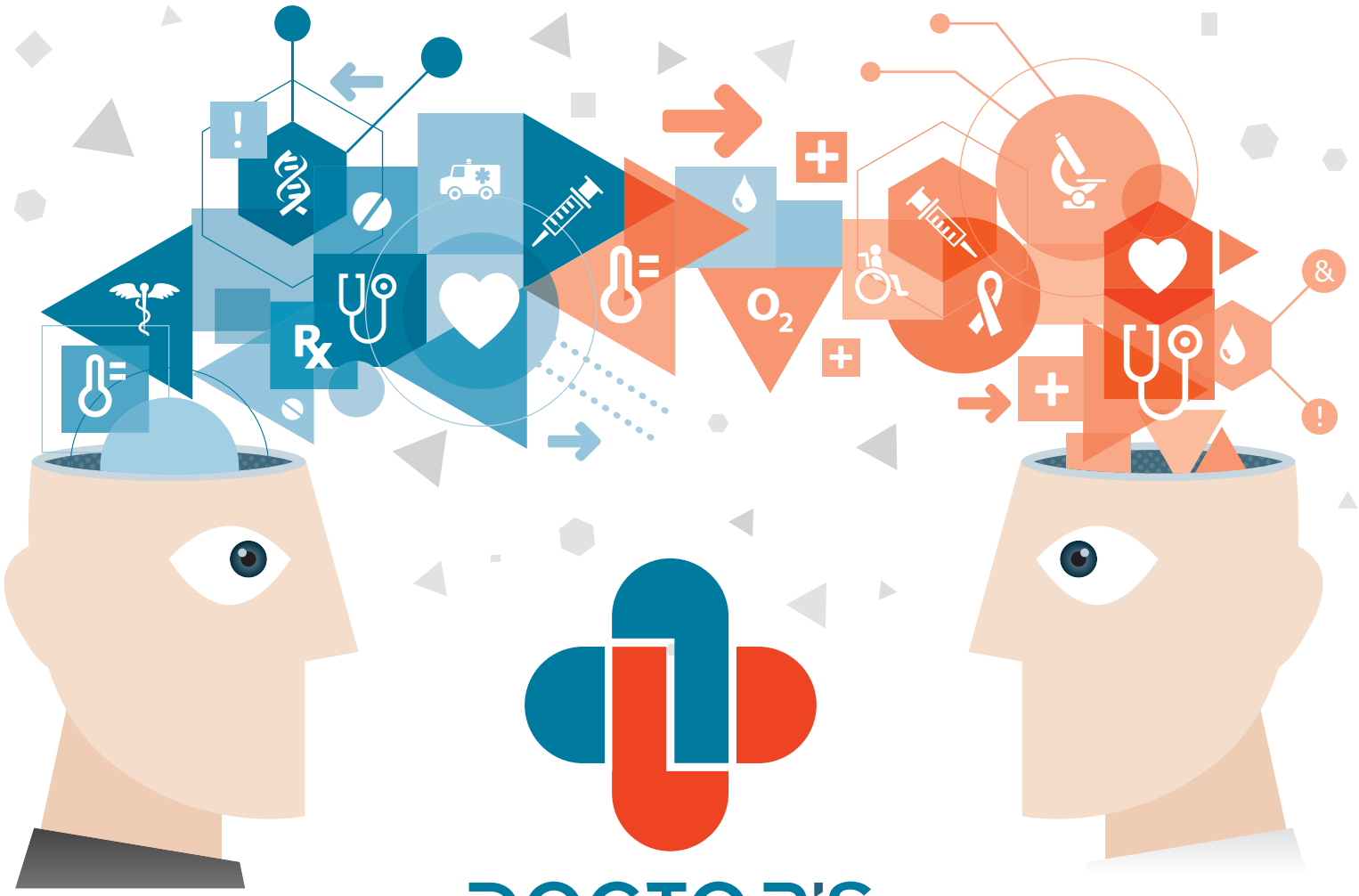

DOCTOR'S DIARY

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BRAINPAN INNOVATIONS

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1 THE CHALLENGE

We at Brainpan Innovations, monitor, track and anticipate upcoming, significant trends that are converging together at a fast pace. According to the experts in academia and industry, we have entered the Big Data Age and are transitioning into the Artificial Intelligence (AI) Age, which has the potential to transform all major industries and sectors. This is especially relevant for domains like search engine (Google), e-commerce (Amazon, Flipkart), social networking (Facebook, LinkedIn, Curofy) etc.

Being a healthcare startup, we are vigorously analyzing the healthcare space in the developing nations and especially in India. We tend to defer with the trend and believe that we are in an age of 'Little Data, Old Data, No Data' because as a society, we are still dwelling on a 5,000 year technology, which is paper.

What baffles us is that most Indian doctors are on top of the 'New Gold' mine, but do not completely understand the potential and value of the asset they own. According to our survey in Tier II cities (Y Class from HRA Classification), the number of patients per day in private clinics vary from 10 - 25 and in hospitals vary from 50 200, generating couple of thousands medical data records annually. However, this data is residing in paper-based prescriptions and medical reports, and not in electronic form i.e. EHR (Electronic Health Records).

An Electronic Health Record (EHR) is an electronic version of a patient's medical history that is maintained by the doctor over

time and may include all of the key administrative clinical data, including demographics, diagnosis, prescription, medical history, immunizations, laboratory, and radiology reports.

The value of electronic medical data is surprisingly underestimated and underutilized in our country. Right from acting as catalysts in drug developmental projects to customized private care, their utilities are endless. As an example, comprehending the structure of the medical data held in thousands of data points of the EHR systems can quickly find relevant patterns, consequently, helping us reveal the most advantageous way to define the line of treatment while simultaneously determining what drugs, tests, and other procedures contribute to the optimal outcome.

To be able to make a difference to people' lives and address unmet patient needs, the healthcare companies and research organizations require to have access to health data, so as to implement Machine Learning or Computer Aided Diagnosis (CAD) techniques to improve their medical diagnosis. Wouldn't it be better to have an algorithm which analyzes chest CT and detects emphysematous regions in the lungs or alerts when there is an indication of pulmonary hypertension? Other possible uses in acute cases of heart ailments, strokes, or quantifying high-risk pregnancies, fibroids from gynecology viewpoint will be ground-breaking.

However, most Indian doctors (in Tier II cities) are not yet comfortable in transitioning to a cloud based SaaS platform from pen and paper, despite the Digital India initiative and behemoth rise of the high speed internet (3G & 4G) services. Sadly, if doctors will not use it, it will not reach to patients.

We are convinced that the current strategy (Feet-on-the-Street and Digital Marketing) needs to be revamped completely and we are looking for answers to the following questions:

1. Why are doctors in India not leveraging this enormous data pool to accelerate Machine Learning and Computer Aided Diagnosis (CAD)?

2. How can we acquire vast majority of health data?

3. How do we motivate Indian doctors to use the technology?

4. Is there a way to directly offer similar services to patients instead of routing it through doctors?

5. How do you define and evaluate the product matrix?

SUBMISSION

Please submit your analysis and recommendations to

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