

Form 2: Literature Documents

1.Team No: 13

2.Project Title:

Enhancing Healthcare: Seamless Integration of Computer-Based Medical Data.

3.Comparing Existing Methods

S.No.	Author(s)	Method	Advantages	Disadvantages
1.	Quingguo Zhang, Bizhen Lian, Ping Cao, Yong Sang, Wanli Huang, and Liang Qi	PDFM(Privacy-free Data Fusion and Mining) is the platform that focuses on the partial patient data privacy and Internet Of Health(IOH) which is distributed among different departments. Used data integration and mining solution for better services.	Provides a health-services platform. Time-Efficient and Privacy-preserving platform.	Does not consider data diversity. Less performance in privacy protection. It does not focus on fusing different privacy protection solutions.
2.	Cai Xuifen and Xu Yabin	CPR data integration using hybrid ontology which eliminates heterogeneity in data.	No heterogeneity when data is integrated. The integration is performed smoothly.	No data searching platform. The data cannot be shared when ontology is used.
3.	Hao Jin, Yan Luo, Peilong Li and Jomol Mathew	Secure and privacy-preserving medical data sharing with a focus on blockchain-based approaches.	High Security. More Privacy.	High Implementation costs. Cannot focus on managing multiple databases.

References:

- [1] Quingguo Zhang, Bizhen Lian, Ping Cao, Yong Sang, Wanli Huang, and Liang Qi, "Multi-Source Medical Data Integration and Mining for Healthcare Services", *IEEE Access*, vol.8, pp.165010-165017,2020.
- [2] "Computer-based patient record data integration method based on ontology" by Cai Xuifen, Xu Yabin in 2011 at IEEE International Symposium on IT in Medicine and Education.
- [3] Hao Jin, Yan Luo, Peilong Li and Jomol Mathew, "A Review of Secure and Privacy-Preserving Medical Data Sharing", *IEEE Access*, vol.7, pp.61656-61669,2019.

Signature Supervisor |

