

Background

- To reduce the cost of healthcare expenditures in China, the government has developed a centralised volume-based procurement (VBP) policy for drugs and medical consumables since 2018.
- VBP has played an effective role in market regulation and government intervention currently. Previous studies have showed VBP policy demonstrated positive effects in terms of price reductions and cost savings, and accelerated the substitution of generics against branded drugs^[1-3].
- However, with the robust implementation of the VBP policy, the current situation of China's healthcare industry has changed, and some problems and new challenges have emerged^[4,5]. Due to the lack of a well-coordinated regulatory mechanism, the effectiveness of the VBP policy cannot be guaranteed. Procurement and monitoring of VBP drugs still deserve further attention.

Objective

To explore the data-driven situation of the monitoring of drug volume-based procurement implementation in Shanghai, China.

Methods

- Literature review and key informant interview were used to develop the monitoring model framework and indicator system.
- The data-driven situation of VBP monitoring including the issues of data infrastructure were investigated through the empirical analysis based on data of first to seventh round of VBP and post-contract procurement in Shanghai, China.

Results

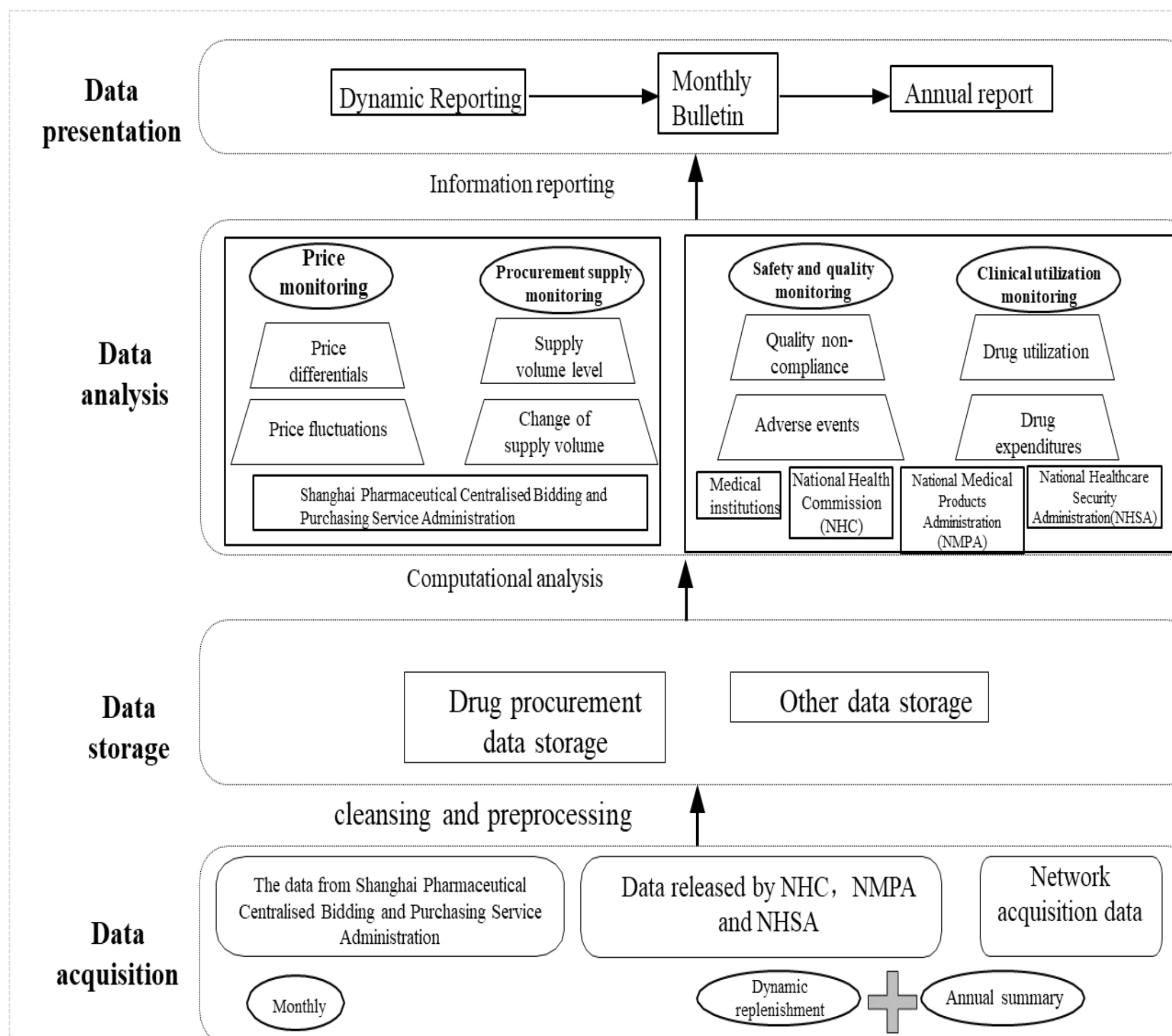


Fig 1 The logical model of VBP monitoring

- Price monitoring** focused on price differentials around tender drug price and abnormal price fluctuations along the VBP implementation. **Procurement supply monitoring** examined the level and change of supply volume in addition to price monitoring. **Safety and quality monitoring** surveyed quality non-compliance and adverse events of VBP drugs. **Clinical utilization monitoring** described the drug use and expenditures in clinical settings (Fig 2).

- Our investigation based on empirical analysis of VBP data showed some gaps to narrow regarding the development of data-driven nature of monitoring and associated data infrastructure.
 - Firstly, data from different procurement periods were fragmented, preventing effective data linkage and leading to problems of missing fields.
 - Secondly, monitoring may lag to some extent because of the necessity of adequate length of time-series data.

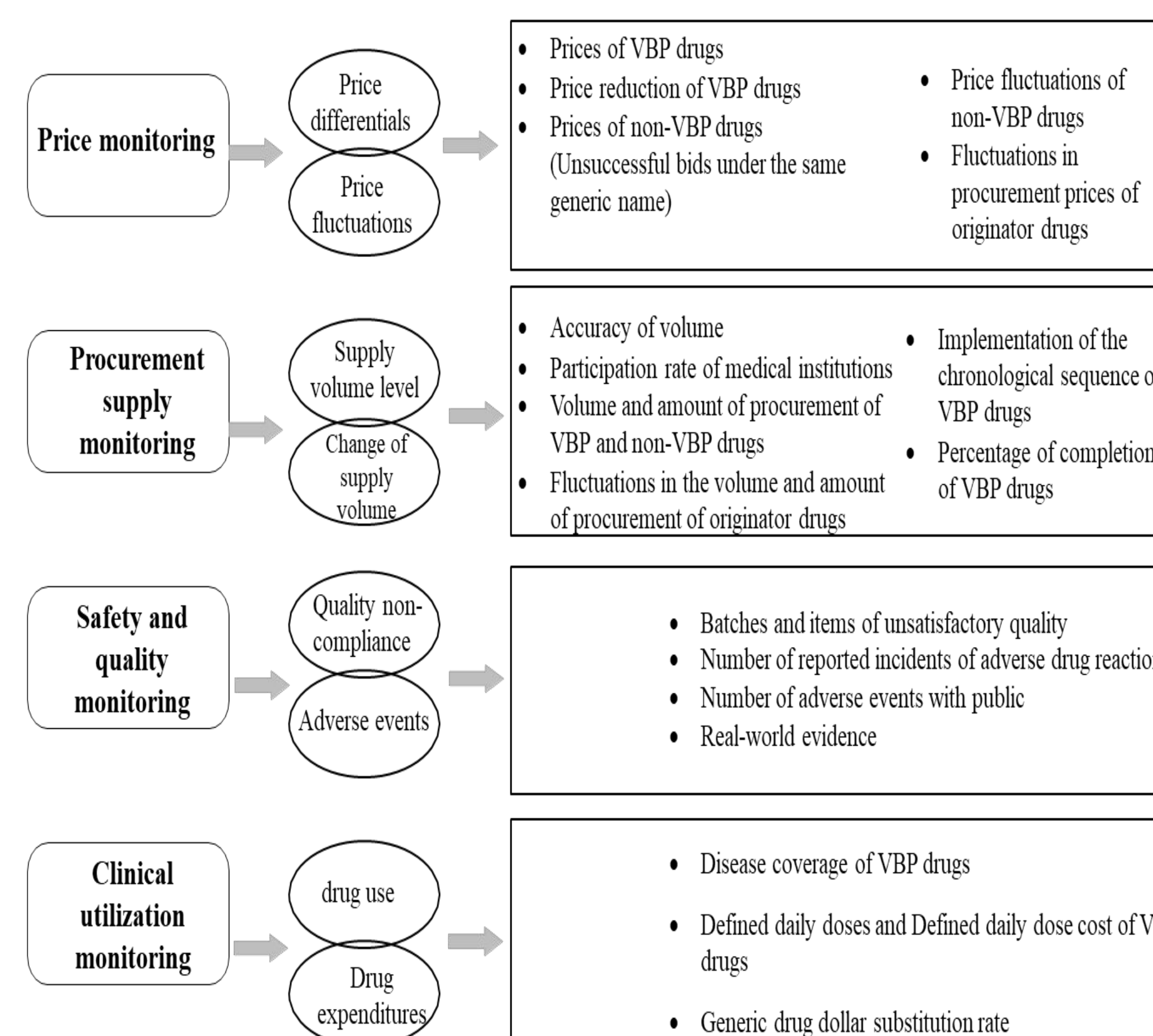


Fig 2 The key indicator of monitoring dimensions

Results

- Thirdly, data concerning clinical utilization of tender drugs were stored in hospitals islanding from the current agency in charge of VBP.
- Fourthly, the data after VBP contract period challenged a consistent analysis because of the diverse post-contract policies across different provinces.

Conclusion

Although the monitoring of key VBP implementation issues could be overall possible with the above four-dimension monitoring framework, the data-driven situation of monitoring and related data infrastructure development are to be substantially enhanced.

References

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