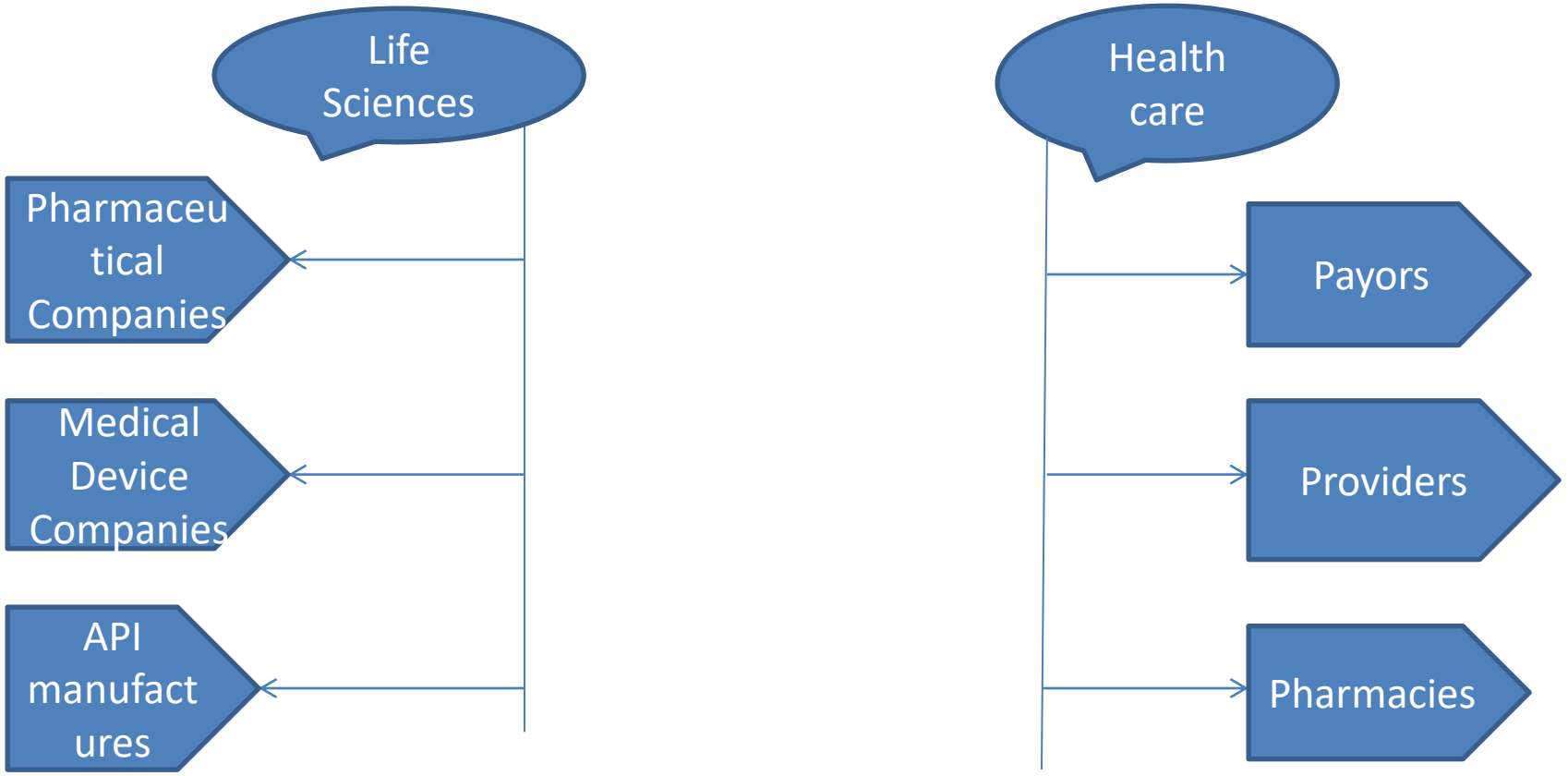
Health Care Analytics

Lecture 21

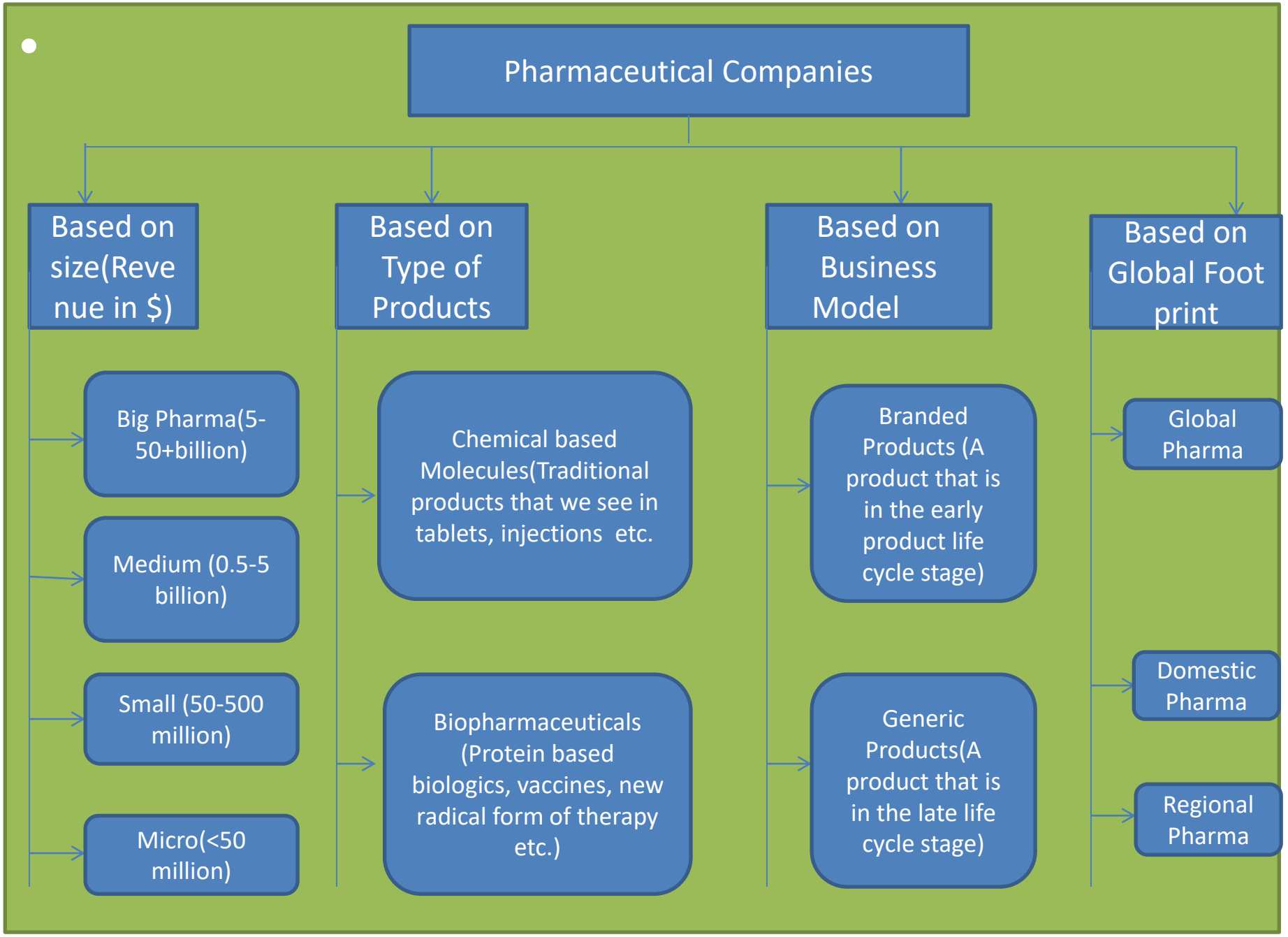
22/09/2021

How do we define Life Science and Health Care Industry?

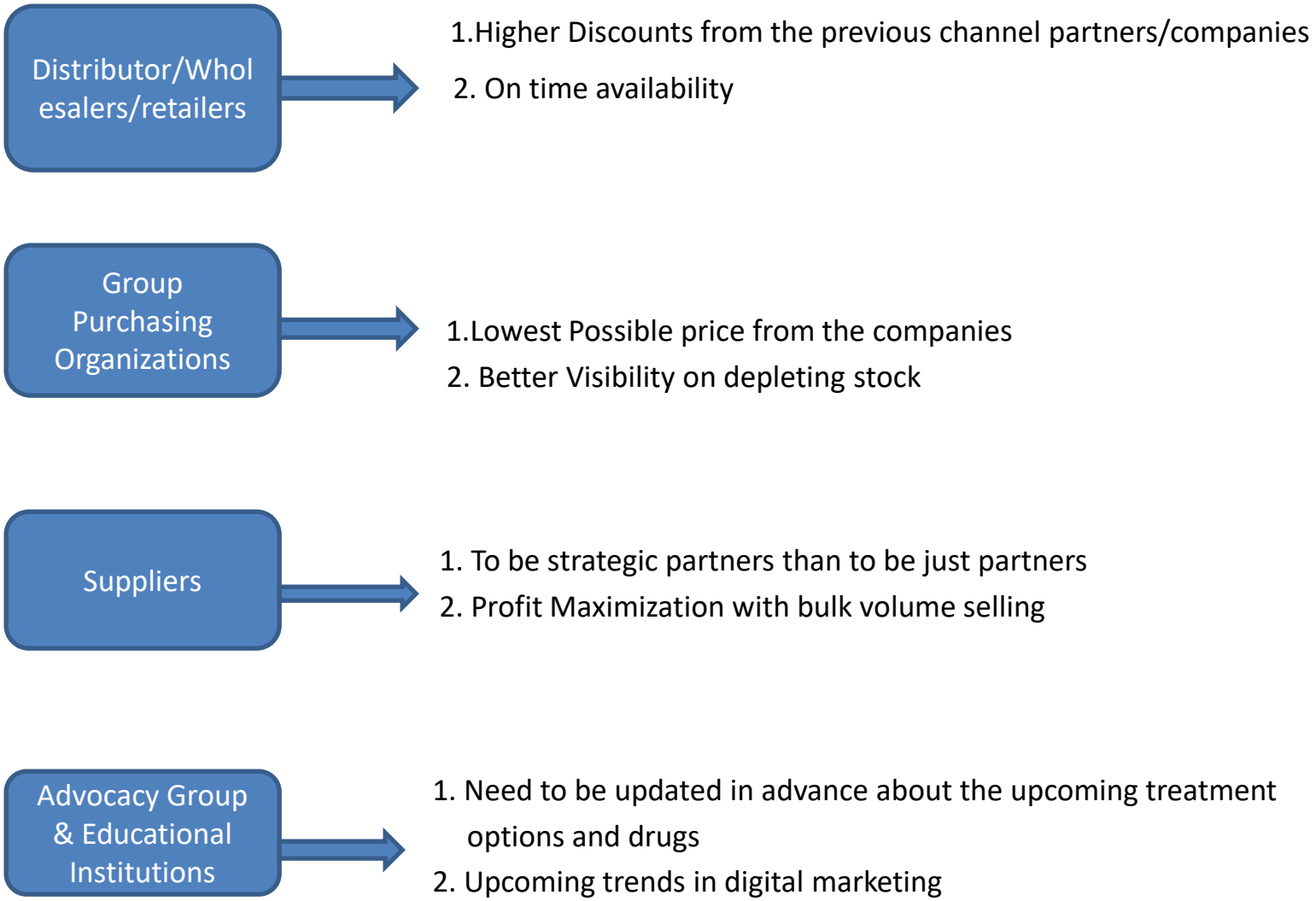
- Life Sciences and health care industry has multiple stakeholders which work in close collaboration to deliver superior patient care.



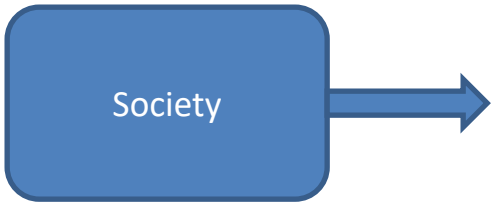
API: Active Pharmaceutical Ingredient


Pharmaceutical Companies
Based on size(Revenue in $)
Based on Type of Products
Based on Business Model
Based on Global Foot print
Big Pharma(5-50+billion)
Medium (0.5-5 billion)
Small (50-500 million)
Micro(<50 million)
Chemical based Molecules(Traditional products that we see in tablets, injections etc.
Biopharmaceuticals (Protein based biologics, vaccines, new radical form of therapy etc.)
Branded Products (A product that is in the early product life cycle stage)
Generic Products(A product that is in the late life cycle stage)
Global Pharma
Domestic Pharma
Regional Pharma

Major Stakeholders



Major Stakeholders (contd…)

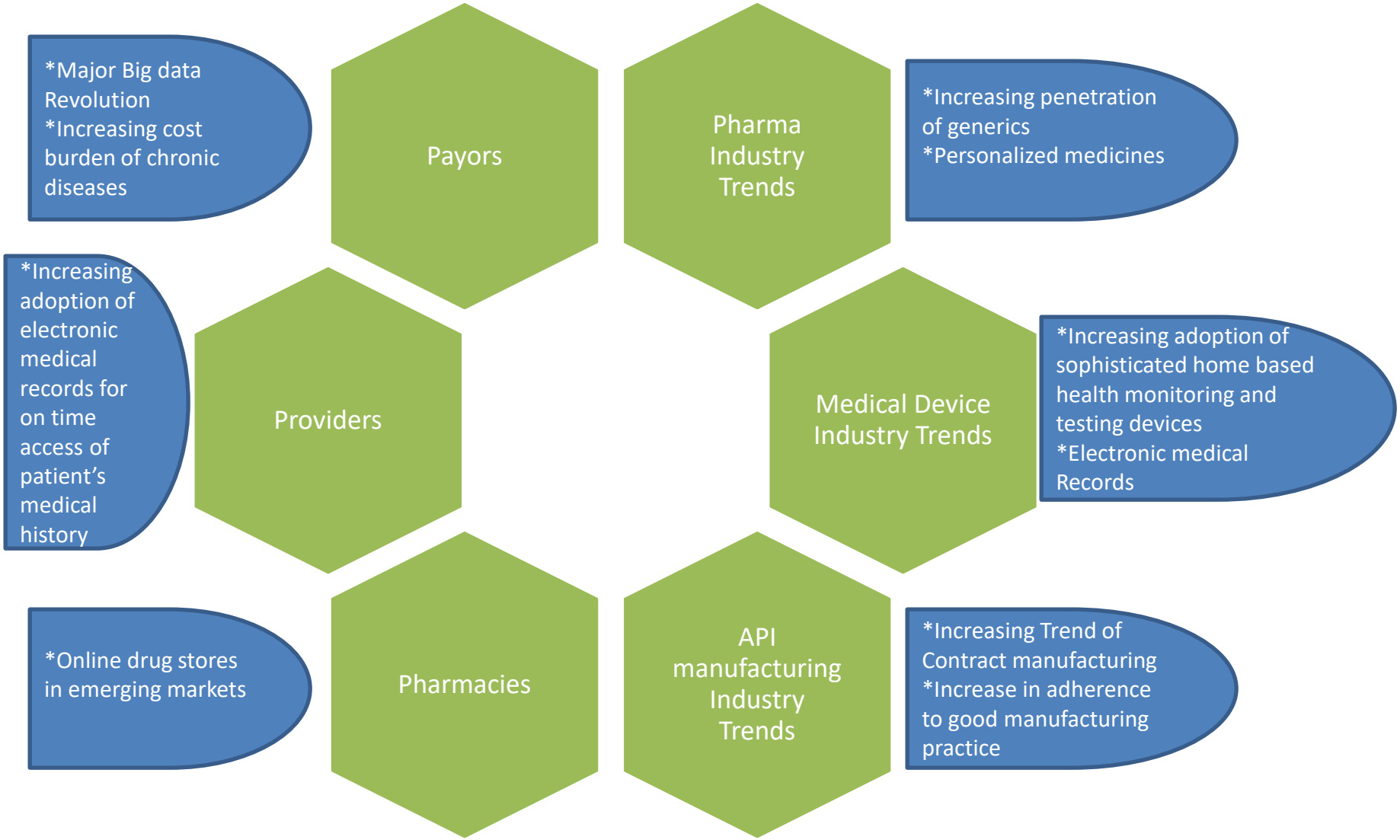


1.Better Corporate Social Responsibility (CSR) initiatives

1.Best Cost control
2. Better control over drug safety and efficacy
3. Better quality monitory measures in place & preparedness for any major epidemic outbreak

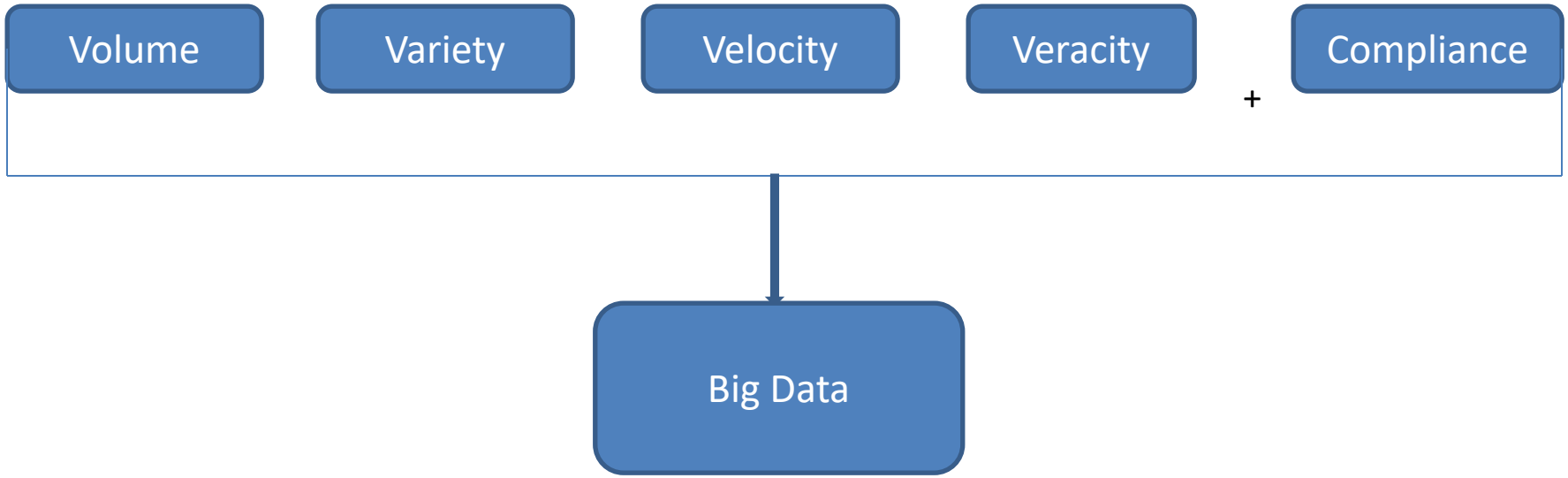
1. Continuous improvement/innovation with quality results
2. Higher Focus on in vitro diagnostic device(IVD) & Point Of Care (POC) test
3. Better reach with more awareness at provider level

Current trends in Life Science and Health Care Industry

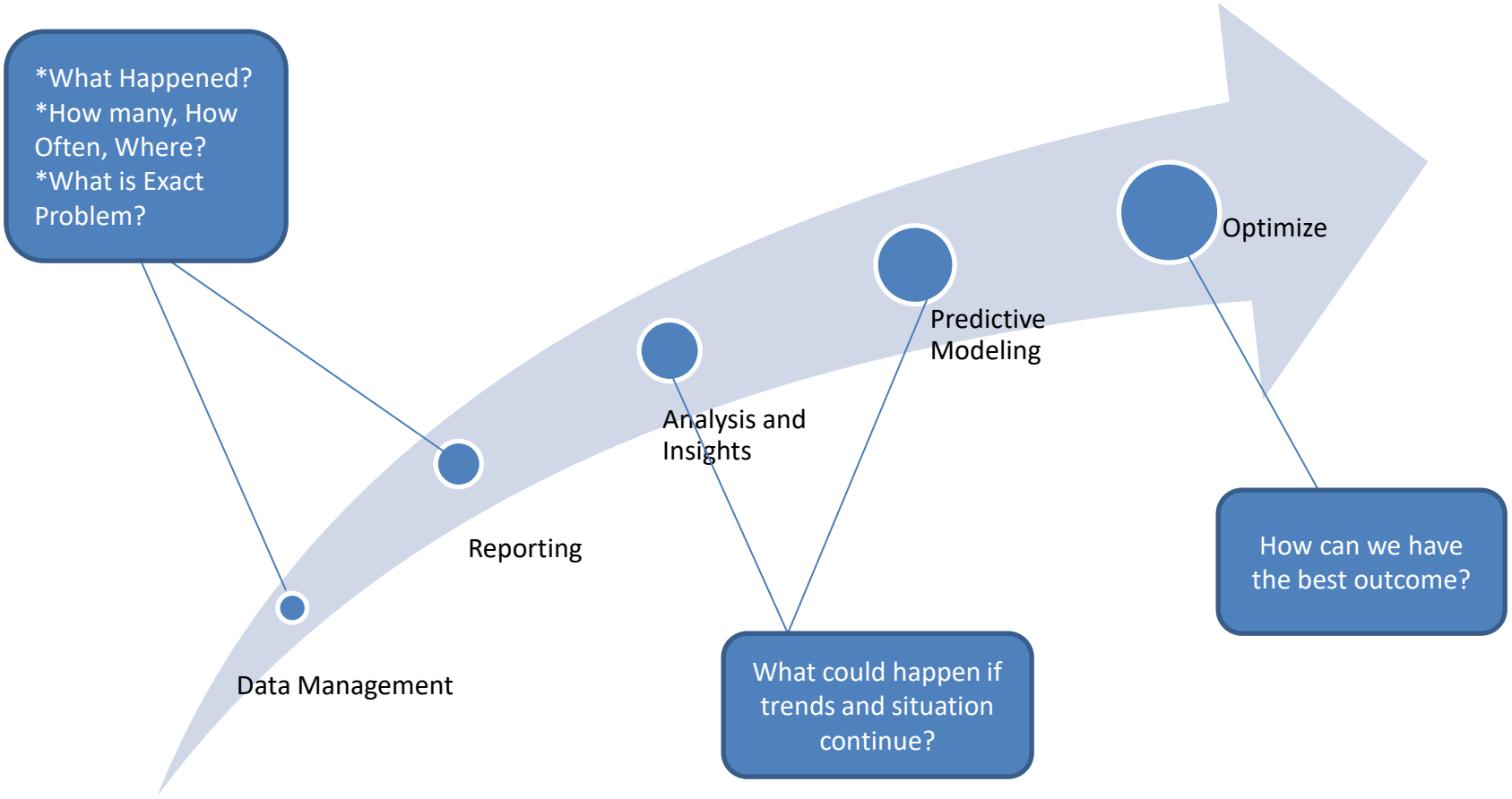


Role of Big Data Analytics in Health Care

- Big Data : Data sets which are so large and complex that cannot be/impossible to process through traditional data processing application is termed as Big Data.



Big Data Analytics helps Life Science and Health Care Industry from managing complex data to generate valuable insights



BDA is one of the highly demanded offering required by Life Science and Health Care Industry

Commercial Analytics

- Commercial Mobile Apps : For Associates (build awareness on upcoming congresses), for patients(build disease awareness, seek treatment, get diagnosed), for Physicians(access product characteristics)
- Digital campaign and Digital marketing

Big Data Analytics

- Patient Support Analytics: Care and patient management
- Physician Support Analytics : Help physicians understand and improve patient experience from admission to post discharge

Commercial Analytics Platform

- Connected care Platforms : Allow hospitals to monitor and manage instrument utilization during surgery
- Allow hospitals to cut costs and generate clinical reporting for productivity
- Generate and capture data from patient's medical devices and transfer them to central database

BDA is one of the highly demanded offering required by Life Science and Health Care Industry

Enterprise Analytics

- Enterprise Mobile Apps : Improve internal Customer engagement across all functions, improve internal customer experience
- Quality Analytics : Central monitoring of internal quality.

Manufacturing Analytics

- Demand Forecasting : Optimize drug production for demand fulfillment in countries.

Enterprise Analytics Platform

- Translation Platform: Translate data in real time
- HR Analytics Platform

  Optimize talent management
- IT Analytics Platform

  Trust and Ethics Platform : App to help associates report ethics and trust incidences confidentially.

BDA is one of the highly demanded offering required by Life Science and Health Care Industry

Development Analytics

- Clinical Trial Analytics: Accelerate drug development, cut costs
- Social Media Analytics: eRecruitment
- Real world evidence : Develop treatment algorithms
- Demand Forecasting : Optimize drug production for clinical trial sites
- Drug Discovery Analytics: Visualize and Share drug discovery and drug development data across organization
- Trial Quality Analytics

Development Analytics: Platforms

- Business Intelligence Platform : Mostly for Data management and basis reports
- Connected Care platforms: Develop IoT type of service as well as new age tools
- Drug Discovery platforms
- Personalized medicine platform: Collect patient data for every encounter and integrate clinical and patient data to report in an engaging visual manner.