



“Patient Care Quality Improvement via Information Systems”

By: Bill W. Childs

The problem has been addressed
for many years. Today we have a
Problem/Opportunity and a
Synergistic solution

Information Explosion

❖ Information Explosion

❖ Time Line

- 4000 BC to 1800 AD
- 1800 AD to 1900 AD
- 1900 AD to 1945 AD
- 1945 AD to 1960 AD
- 1960 AD to 1970 AD
- 1970 AD to 1975 AD

Number of Years

5,800 years

100

45

15

10

5

Information Explosion #2

Storage Capacity

Bytes

Megabytes

Gigabytes

Terabytes

Petabytes

Exabytes

Zettabytes

Yottabytes

Costs

Dollars

Hundreds of Dollars

Thousands of Dollars

Millions of Dollars

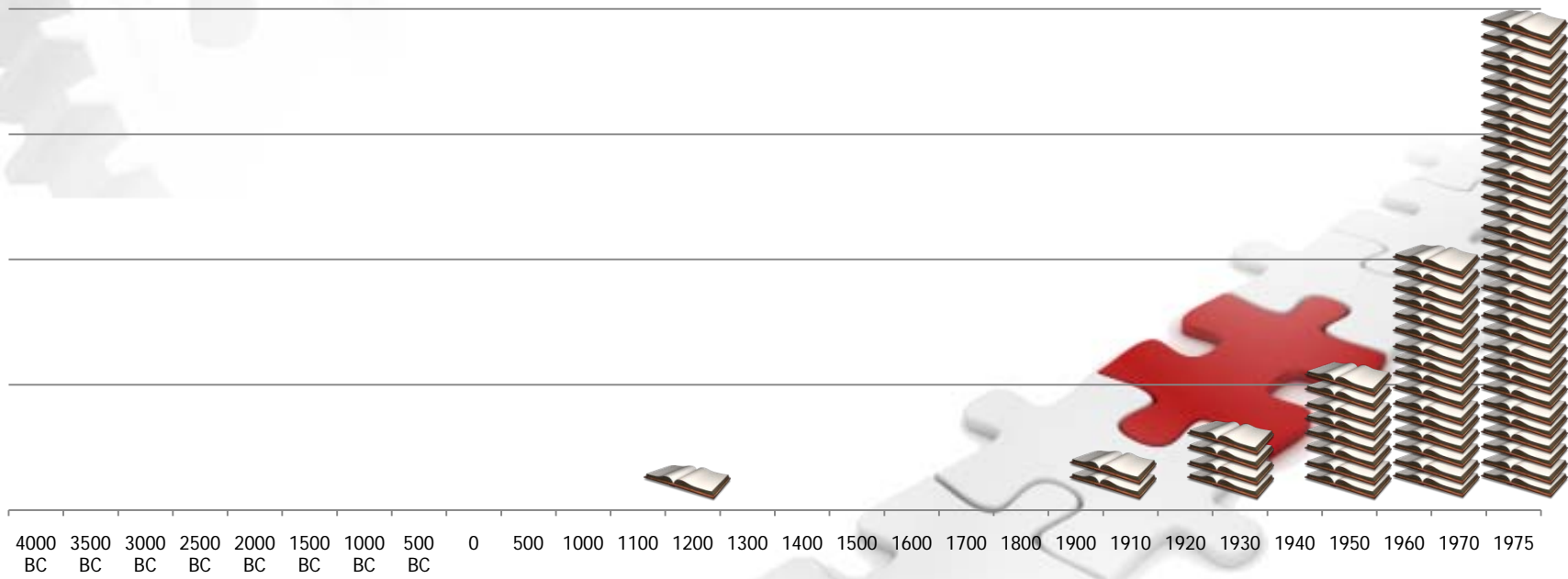
Trillions of Dollars

Quadrillions of \$\$\$

Quintillions of \$\$\$

Sextillions of \$\$\$\$

Information Explosion



Technology Explosions

- ❖ Medicine
- ❖ Clinical / Medical Information Systems
- ❖ High Speed Internets and Web Pages
- ❖ Cell Phones
- ❖ Storage and instant retrievals
- ❖ Standards
- ❖ Invasive and Non-Invasive Patient Monitoring

Quality Improvement via I.S.

- ❖ Continuous Monitoring of Patients V/S
- ❖ Temperature, Pulse, Respiration, BP
- ❖ Blood Sugars, Respiratory rates
- ❖ Electrolyte Balances
- ❖ INR's, Oxygen saturation, Heart rate
- ❖ Heart Valve Performance
- ❖ This list goes on and on