

Enabling Biomedical Research in Europe: Using the Dutch Experience as a Template

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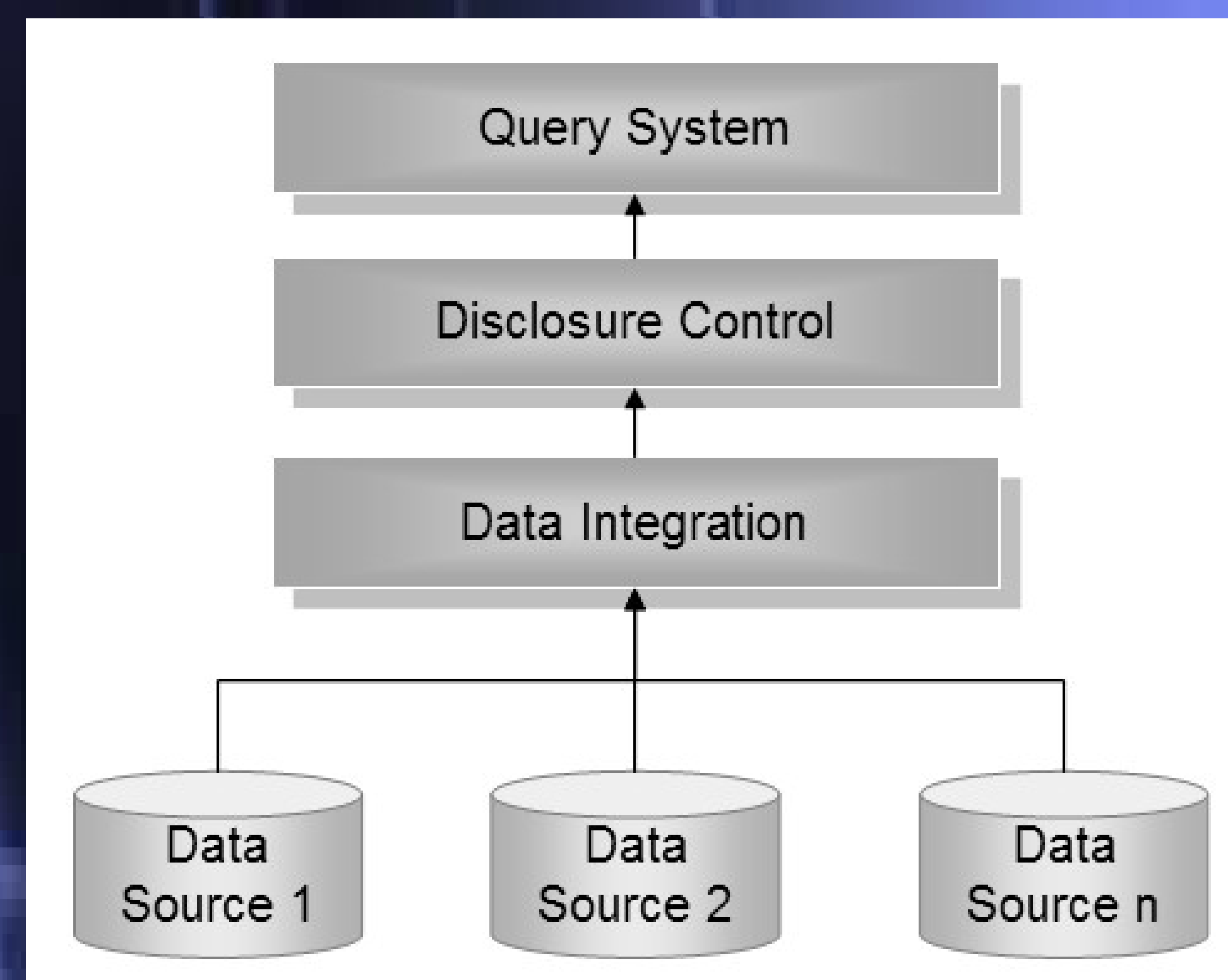
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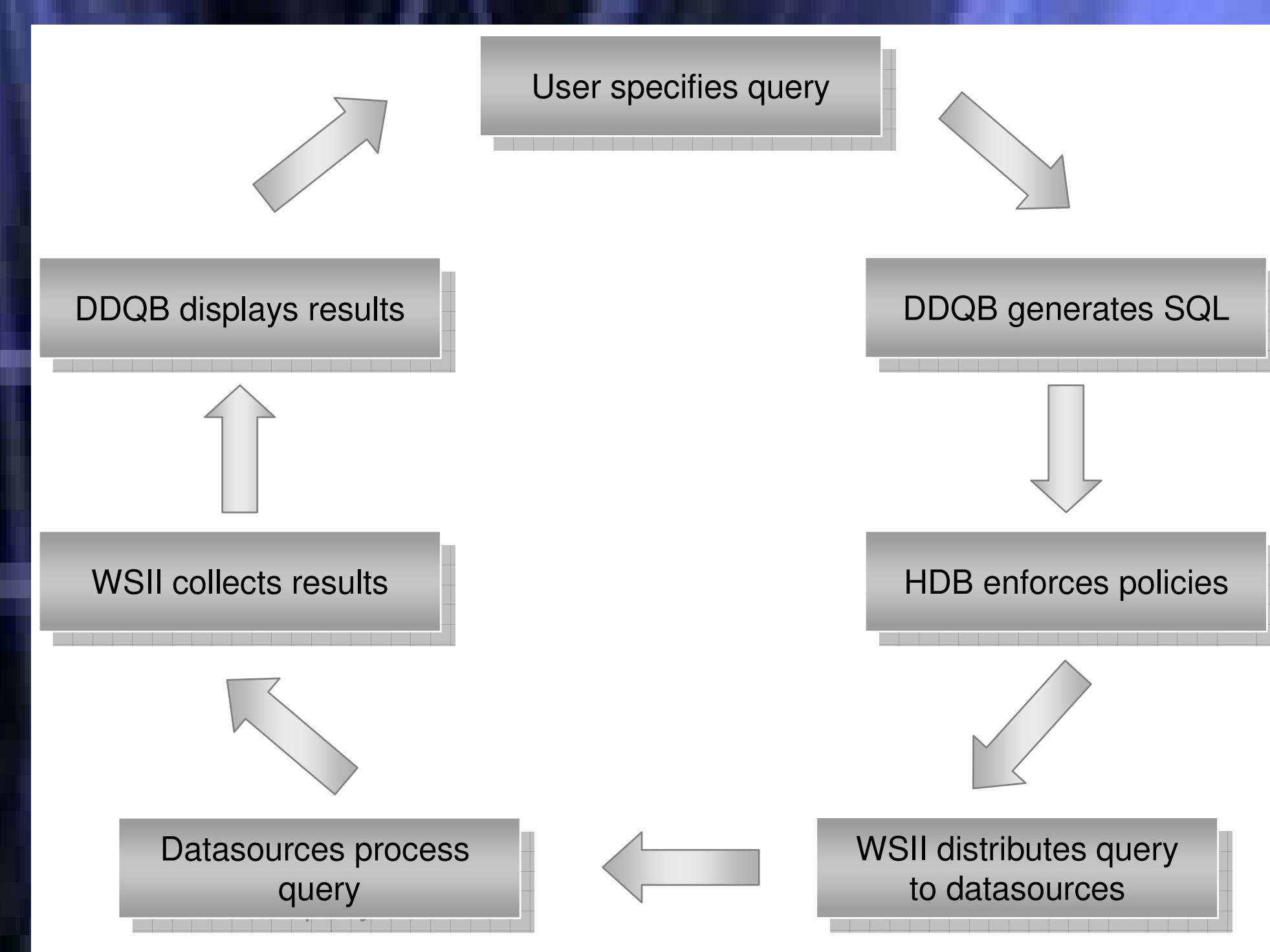
Background

- The Dutch hospital system contains an enormous amount of clinical data in various formats and in independent databases, which may be from differing vendors.
- There is significant investment in these systems and little interest in re-architecting, re-developing and re-deploying newer systems that interoperate and abide by privacy and policy constraints.
- However, a system is needed that empowers researchers.

Solution Architecture



Component Interaction



System Benefits

- Medical researchers get the data they need efficiently. No longer necessary to manually obtain exported data from different systems.
- Reduction in the probability of errors occurring in the data.
- The researcher is not expected to understand the gory details of all the computer systems used across all the units he interacts with.
- The dependency on system administrator has been eliminated. Privacy and security issues are enforced (at the technology level) by the system.
- Increase in the researcher's productivity, as the process of selecting patient cohorts can now be completed in minutes or hours rather than weeks or months.