$Id: 01-alternatives.fig,v 1.3 1997/01/18 21:47:25 gunther Release $, © 1997 by Gunther Schadow, all rights reserved.

Manually integrate HL7 into applications.

Advantages: Code can be written as needed.
Immediate return of investment.
Direct integration of HL7 functionality.

Disadvantages: Reinvent the wheel for every application.
High development costs.
Lack of generality and flexibility.
Standard conformance is not granted.

Example: Unidirectional small HL7 interfaces on legacy platforms like DOS/dBase.

Use interface engines.

Advantages: Existing applications need not be changed.
Centralized maintenance of communication pathways.
Provide for unstable and incomplete HL7 standard.

Disadvantages: Semantically correct mapping of protocols is difficult.
Centralized maintenance of communication pathways.
Encourage unstable and incomplete HL7 standard.

Example: Proprietary "closed" systems.

Use reusable HL7 program library.

Advantages: Only applicational code needs to be written.
No need to care about details of HL7 implementation.
Delegate responsibility for standard conformance.
Implementation effort pays off many times.
Direct integration of HL7 functionality.

Disadvantages: Existing applications must be touched.
Requires more stable and complete HL7 standard.
Requires a reusable HL7 library.