# Meeting the Transaction and Code Set Requirements in a Multi-entity Health System Environment

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John Muir / Mt Diablo Health System

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# John Muir / Mt Diablo Health System

- Located in the San Francisco Bay Area - (corporate offices in Walnut Creek)

- A not-for-profit, multi-entity, integrated health system

- 12 entities include two acute care hospitals, a behavioral medicine and psychiatric hospital, a home health agency, ambulatory surgery centers, outreach Laboratory services, several outpatient service entities, and a foundation model entity that owns 71 physician practices in 19 locations, serving approximately 73,500 covered lives

- We also operate our county's only Trauma Center
  - 733 square miles and a population of 972,000

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# Original High-Level Plan:

- STAGE 1 - Initial Project Development
- STAGE 2 - Management Organization & Processes
- STAGE 3 - Inventory & Audit of Transaction Systems & Manual Processes
- STAGE 4 - Vision and Mission
- STAGE 5 - Alternatives & Decision
- STAGE 6 - Implement Projects
- STAGE 7 - Setup Ongoing Monitoring Processes

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# HIPAA
# TRANSACTION AND CODE SETS PROJECT

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# Transaction Systems Inventory & Audit

- Here's what we found:
  - 15 Applications that generate claims, but no other transactions. No central management
  - Of the 15, 13 bill Medicare in some form (UB, 1500, NCPDP)
  - Of the 15, 10 are performing some level of electronic transmission of claims to Medicare, other payers and/or clearinghouses (and 5 are printing paper claims)
  - 1 additional application that receives and adjudicates claims from other providers -- accepts both manual and electronic claims. Creates paper Remittance Advices.
  - That is, we are both a payer and a provider.

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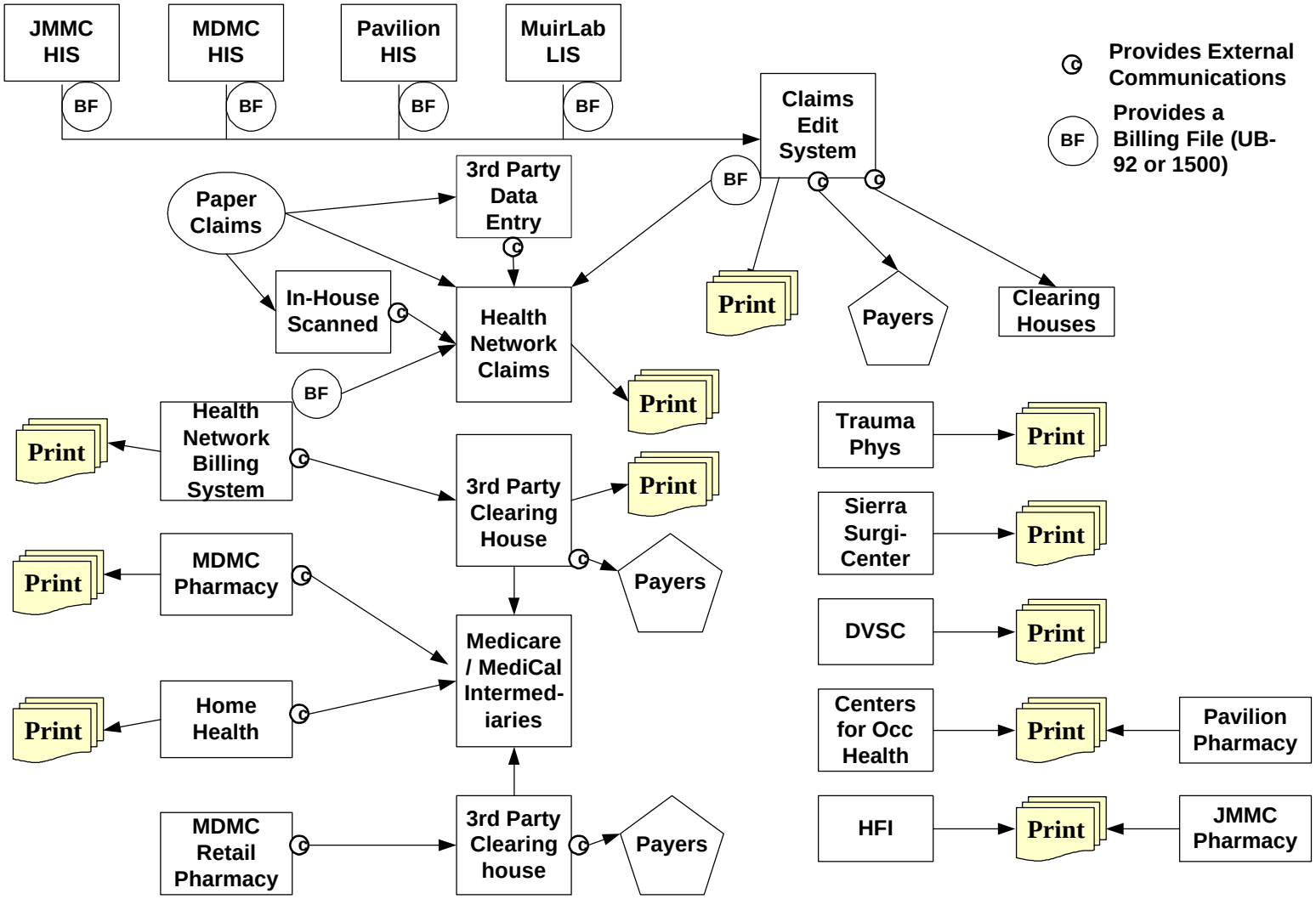
# Current Claims Environment

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# Transaction Systems Inventory & Audit - cont'd

- Responses from Vendors Surveyed:
  - Most vendors surveyed initially either had not even heard of HIPAA and the TCS requirements, or had not formed a strategy
  - Some vendors who did have knowledge were pointing to use of 3rd party or captive clearinghouses, at additional cost, of course
  - Some specialty vendors stated that they would not produce electronic billing transactions
  - Two vendors indicated that they would produce compliant electronic transactions in a future release, but could not provide any specifics
  - Two vendors indicated that they would produce a separate package (at significant additional cost) for generation of electronic claims
  - All but one have not yet addressed transactions other than claims & payments
  - And none are ready to implement us

# Our Understanding of the HIPAA Vision

- The regulations specify data content and format requirements for 9, high volume, mostly (currently) manual transactions

- The vision is to enable healthcare entities to replace expensive, labor intensive, time consuming, inaccurate manual processes (phone calls, faxing, email, letters, paper documents, etc.) with a standardized set of fully automated processes

- If automation can replace manual processes in these and other transactions, millions of dollars could be saved by most payers and providers through elimination of labor and work process redesign.

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# Fine, but what are we actually going to do?

We can either approach this complaining about yet another unfunded mandate imposing a set of regulations that the Health System must adapt its applications to,

or --

We can create the vision that proper implementation of TCS will actually benefit the Health System in several key ways including significant expense reductions, improved customer service, better claims adjudication accuracy, and an opportunity to reduce receivable days.

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# Assuming we choose the “or”

## To achieve the vision, 5 components are necessary:

1. **Standard data content.** The regulations specify what elements of patient information are to be communicated, and what the meaning of each data element is.
2. **Standard data formats.** The sequence of the data elements must always be the same, or each organization will not know which data element is which. The regulations specify the formats for the transactions.
3. **Communication of the transactions.** It won’t help to be able to gather all the required data elements and put them in the proper electronic sequence, if there isn’t some way to send the transactions back and forth between providers, payers, and others involved. Appropriate communications technologies are required. The regulations don’t specify the communications protocols. It’s up to each pair of senders and receivers (trading partners) to agree on these protocols.

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# Achieving the Vision

- **5 Components are Required (Continued):**

4. **New software applications**. Even if the standard transactions can be communicated properly, the goal of replacing expensive, manual processes with automated processes cannot happen unless vendors add new application programs and functions. Today's software will not do the job. We are using it to support all the current manual processes! New applications must be developed to properly utilize the electronic transactions and provide the basis and means for us to replace the current manual processes.
5. **New Work Processes**. Even if the vendors create the necessary applications to fully utilize the electronic transactions, the cost reductions and other benefits will not be achieved unless we redesign all the work processes associated with the transactions and eliminate the labor and manual functions currently in place.

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# Like Most of You, We are Heavily Vendor Dependent

**What if they don't come through on some, most, or all of the first 4 components?:**

1. **Data Content**
2. **Standard Formats**
3. **Communications**
4. **New Applications**

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# Then We'd Have To Do It!

## (Well, #1-3 but we'll just have to wait for #4)

**Capabilities required to manage communications:**

- Checking, editing, and validating the transactions before they are sent out, handling error conditions with the vendor application system, etc.
- Routing compliant transactions outbound to payers or clearinghouses using a variety of protocols and infrastructures (dial-up, Intranet, etc.) using both batch and real-time technologies, handling error conditions, flow controls, etc.
- Monitoring for and receiving inbound transactions from payers and clearinghouses using both batch and real time technologies.
- Routing inbound transactions to the proper applications system in a way and format that the system can accept them.

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## Then We'd Have To Do It! - cont'd

- Managing trading partner (payer and clearinghouse) communication details that are not specified in the transaction standards (e.g. whether or not dashes are put in the SSAN, the delimiters used within and between records, the structure and sequence of the records in the transmission, etc.
- Logging Records of the transactions, error handling, archiving, restoring from failures, etc.
- Reporting
- Security and Encryption

***Additional requirements if vendors won't structure valid transactions:***

- Multiple capabilities to extract the required data content from a vendor's system and/or gather data outside a vendor's system.
- Converting extracted data elements, however they might be obtained, into the required transaction formats.

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# Need for an *In-house* Approach

Since many vendors could not articulate their strategy (and still can't), the Health System had to formulate its own strategy to protect its revenue stream and achieve compliance:

- Form a working group
- Further assessment of claims & RA generation / receipt
- Finalize list of required capabilities
- Vendor search and review, RFP to finalists
- Develop operational and technology alternatives
- Finalize analysis and make recommendations
- Approvals and implementation plans

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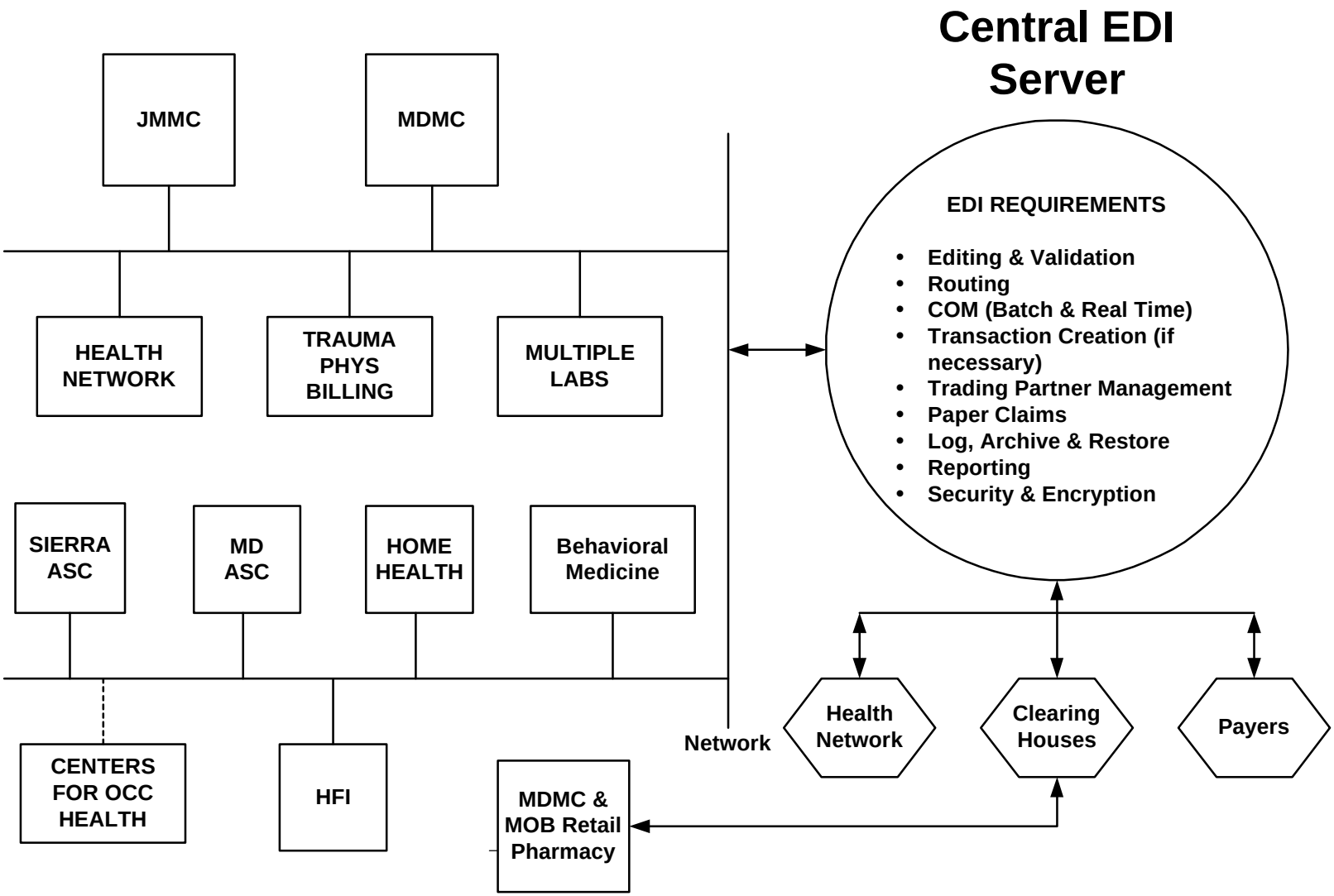
# The JMMDHS Central EDI Service (CEDI)

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# Phase One Strategy

Architecture provides the framework to support all electronic formats. Initial T&CS Project, however, will focus first on those formats that will guarantee continuation of the electronic revenue stream.

- Provide means to generate 837s if applications cannot
- Automate editing & transmission of valid 837s to payers
- Provide means to track transmission & receipt (inventory of claims outstanding)
- Provide a means to receive and automatically update remittance.

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# Key CEDI Requirements Areas - Phase 1

- Key Provider Functionality:
  - Full Featured Bi-directional EDI Communications
  - Claim Submission (837)
  - Claim Payments (835)
  - Claims Inventory Management
  - Claim Follow-up (276 / 277) (If Payers are ready)
- Key Payer Functionality:
  - Claim Receipt (837)
  - Claim Processing / Adjudication
  - Claim Payment (R/A) Distribution (835)
  - Claim Status Response (276 / 277)

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# CEDI Requirements - Claims

- Claims batch load (FTP) from billing system
- Claims transmission from billing system
- Claims batch transformation
- Compliance edit run
- Claims editing & rejection
- Aggregation of claims by payer (destination) for transmission
- Transmission of claim batches to payers
- Receipt of 997 application acknowledgement
- Inventory & auto-tracking of sent claims

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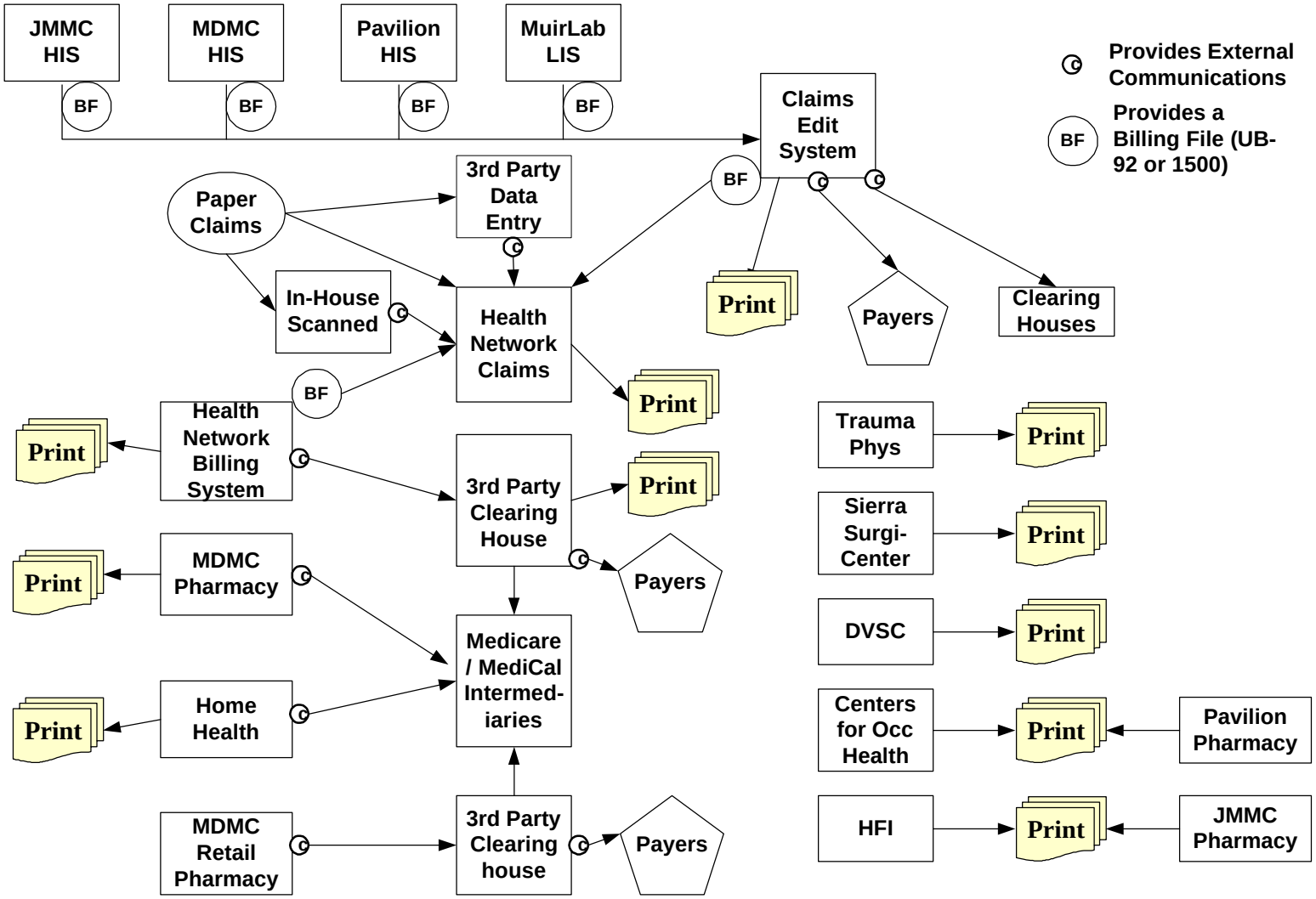
# Current Claims Environment

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# 3 Alternative Scenarios

- Scenario #1 - The “Silo” strategy
  - Each billing department is “on its own”
  - Simplest in terms of project coordination
  - Highest risk for revenue streams
- Scenario #2 - The “Central Switch” strategy
  - Uses CEDI as the single in-house switch for all transactions
  - Centralizes all batching & transmission responsibilities
- Scenario #3 - The “Dual Switch” strategy
  - Recognizes existing management boundaries
  - Capitalizes on existing departmental solutions


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# Scenario # 1 - The “Silo” Strategy

Description: Departments currently billing and collecting would retain their current responsibilities and would address the HIPAA transaction and code set requirements utilizing whatever functionality is provided by their vendor.

## Pros

- Retains Department independence
- Least costly for claims/remittance
- Lower risk for temporary business interruption

## Cons

- Provides no central communication capabilities
- Most complex to implement and administer
- May require multiple trading partner agreements for same trading partner
- Eliminates back-up technology to address vendor “gaps”

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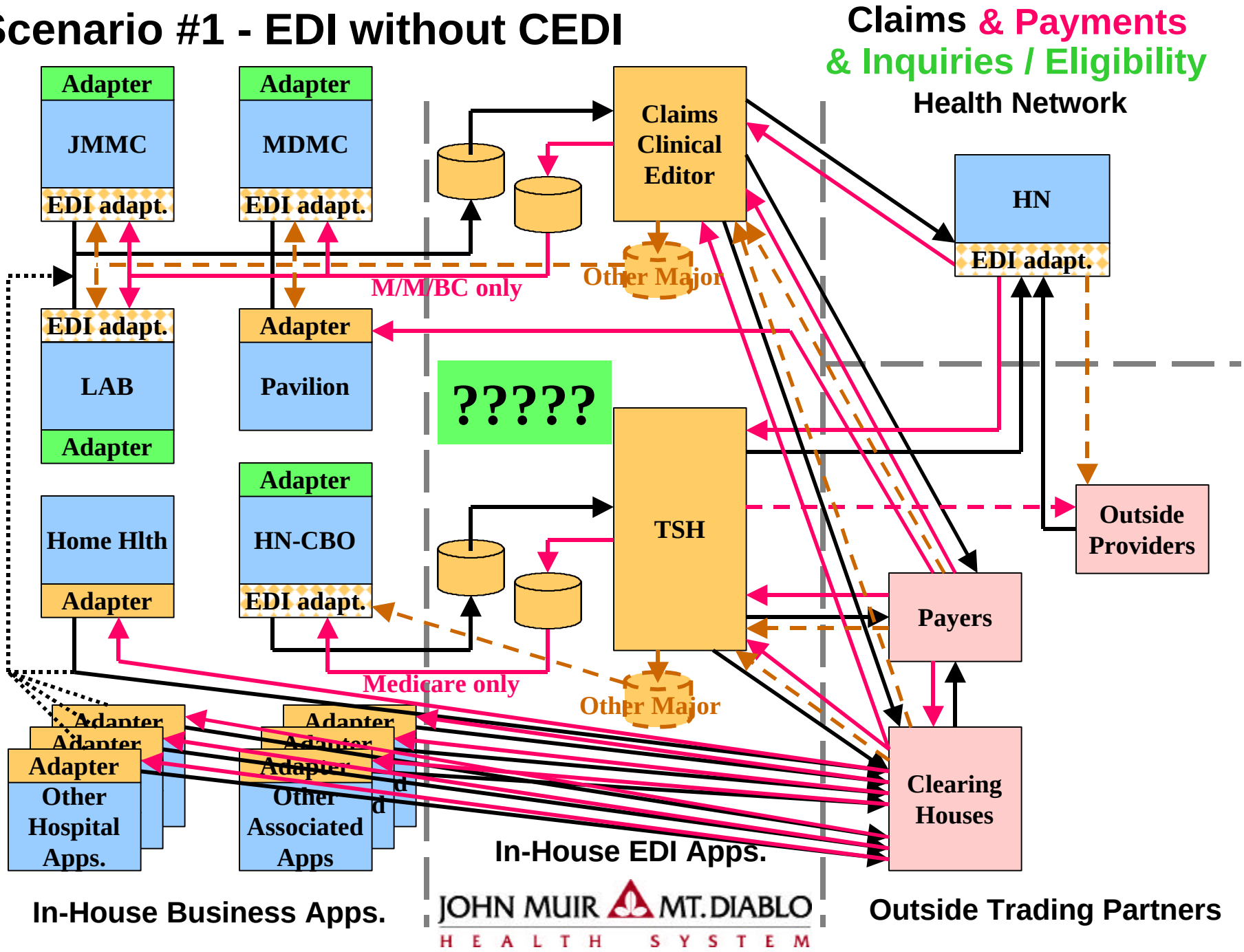
# Scenario #1 - EDI without CEDI



# Scenario # 2 - The “Central Switch” Strategy

Description: A new Centralized EDI solution (CEDI) will be used to perform several centralized functions such as editing, communication, trading partner management and transaction creation for non-performing vendor applications.

## Pros

- Single application and control for transaction communications
- Back-up technology to address vendor “gaps”
- Consistency of edits before sending, receiving and routing
- Reduced cost and complexity necessary for communications
- Allows for one trading partner agreement implementation for each trading partner

## Cons

- Increased risk of temporary business disruption
- Significant operational changes versus current work processes
- Introduction of new technology

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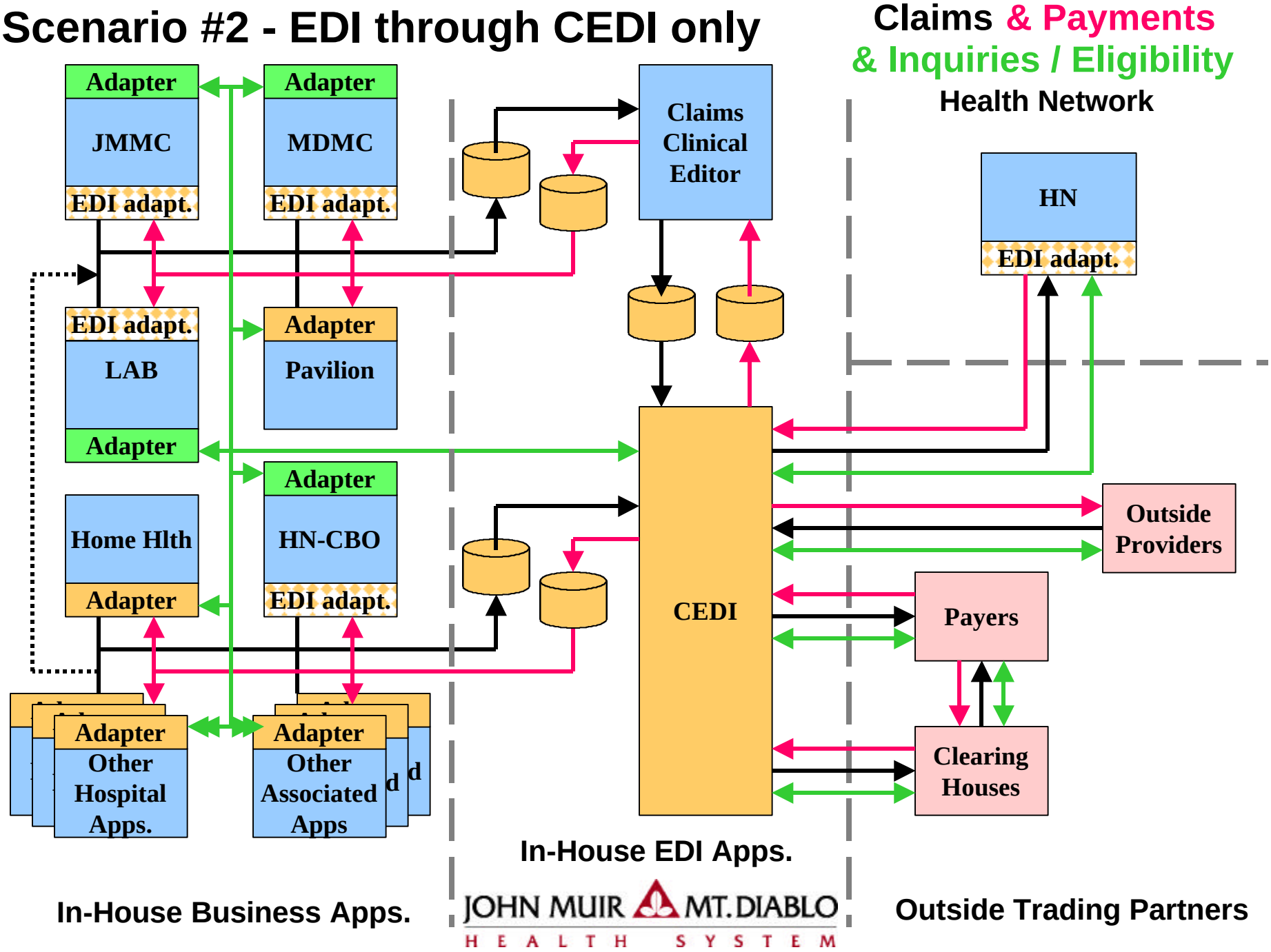
# Scenario #2 - EDI through CEDI only



# Scenario # 3 - The “Dual Switch” Strategy

Description: CEDI and an existing application will independently be used to perform functions such as editing, communication, and trading partner management.

## Pros

- Back-up technology through CEDI to address vendor “gaps”
- Reduces operational impact on current work processes
- Lowers risk of complete interruption to revenue stream
- Lays the foundation for a Central Switch migration
- Better than Silo strategy

## Cons

- Adds cost and complexity through a dual implementation
- Introduction of new technology
- Duplicity of common functions such as editing and tracking will result in a lack of consistency
- No as good the Central Switch strategy

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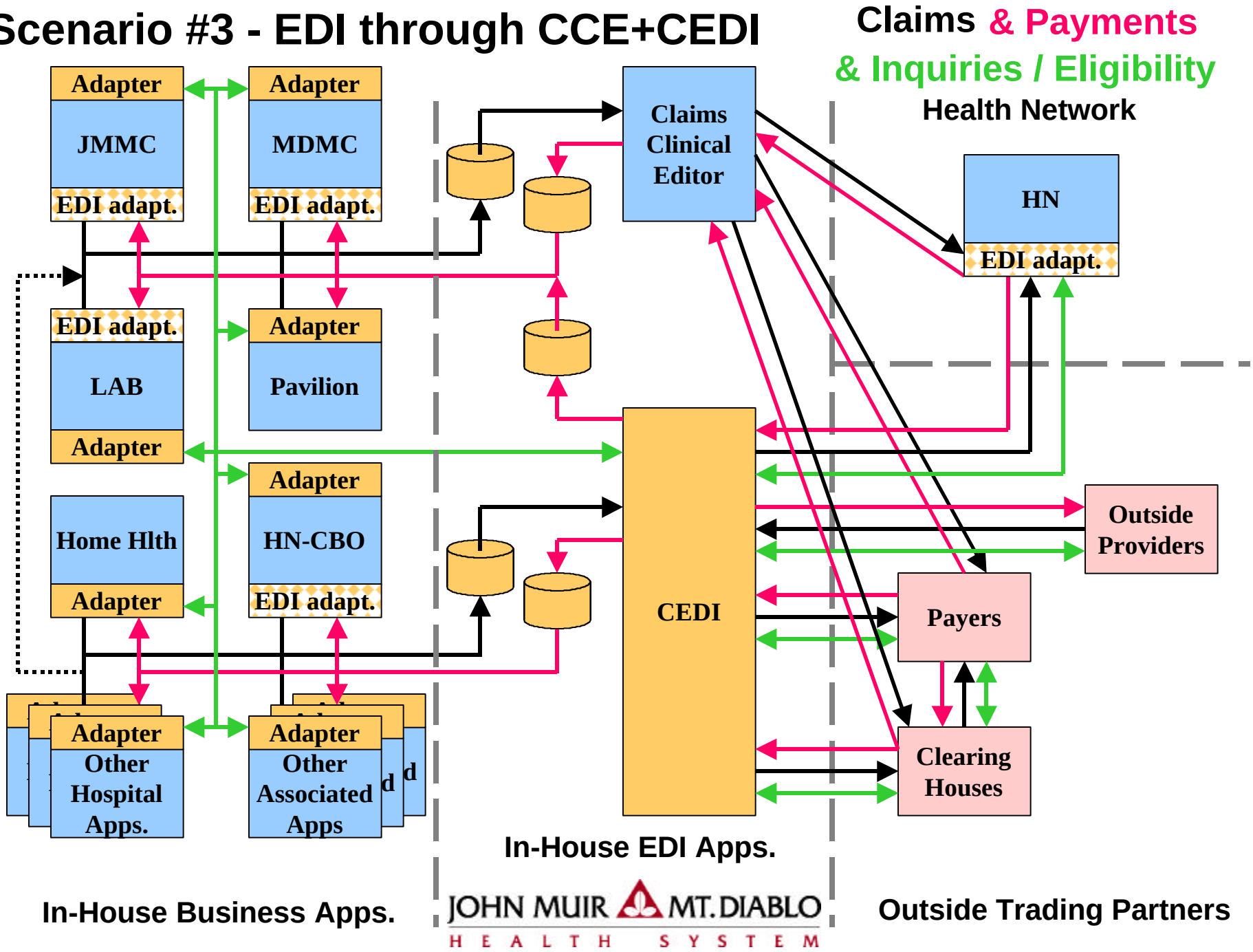
# Scenario #3 - EDI through CCE+CEDI



# CEDI Project

- CEDI project was established to research and acquire software, hardware, and staffing (1 FTE) for development of adapters and background agents
- CEDI application will automate all steps after production of the raw claim in the business applications
- CEDI project will also be called upon to create “adapters” which will extract data (or can be used in conjunction with the business applications to gather additional data)
- CEDI project must have the capacity to accommodate additional transactions and to take up the “slack” in the other business systems where they have not been appropriately tooled.

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# TCS Responsibility & Implementation

- Organizational responsibility for development and hosting of CEDI has been placed in ITS, and is to be coordinated through the HIPAA Project Office
- Organizational responsibility for the clinical editor application has been placed in the Health System's Corporate Finance Department, and is managed by the business office
- Responsibility for contact of payers and providers and development of the trading partner agreements is shared between Finance and the Project Office
- Operational responsibility for the data in claims will remain with the individual business functions

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# Current Status

- CEDI application level-3 requirements have been generated and reviewed
- CEDI product core software acquired
- Hiring is underway
- CEDI product training will be in March
- Planning for each interfacing application is underway
- Second round of contacts to vendors is commencing - HR3323 has affected some vendor plans

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# Next Steps - Technical

- CEDI software will perform some, but not all of the required functions; once it is installed and piloted, development of the claim repository and reporting will commence
- Use of X-12 acknowledgements is anticipated (and is addressed in the IGs), but is not mandated - will have to determine if the 997 is standard in the industry currently
- There is no uniform methodology in the TCS rules for addressing and routing -- need to research and establish a template methodology
- Need to acquire, install, test, and implement upgrades to each of the 15 applications that perform billing functions, and the application that performs claims adjudication and payment
- Acquire / Implement methods for assuring EDI privacy

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# Next Steps - Process

- Trading partner agreements must be designed, drafted, approved, and negotiated with a core set of payers -- templates for streamlining of TPAs need to be developed
- Privacy of claims data and the COT agreements must be addressed
- Business agreements must be reviewed and updated to explicitly spell out agency relationships
- New departmental procedures must be developed around use of the new electronic transactions (primarily those other than claims)
- Revise business processes where current billing / payment processes will become invalid under HIPAA

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