

Inference MD - MVP v1

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Tags: [Inference MD](#) [MVP](#) [Product](#)

Status: #teen

References

1.

MVP v1 Comprehensive Requirements

Priority Areas

1. User Interface (UI) and User Experience (UX)

- **Intuitive and Clean Layout:** Clearly defined three-panel interface:
 - **Left Panel:**
 - Persistent, scrollable patient interaction and conversation history
 - Easy access to "Start New Case" and retrieval of previous cases
 - **Central Main Panel:**
 - Primary chat interaction with doctors
 - Clearly distinguished AI and doctor messages
 - Concise, to-the-point summaries
 - **Right Panel:**
 - Interactive reasoning trace panel
 - Visual summary of each backend reasoning step
- **Stage Awareness:**
 - Status bar design: Straight horizontal line with dots representing stages at the top of the main page
 - Active stage clearly highlighted
 - Completed stages visually distinguished by a different color from the remaining ones
 - Automatic scrolling and clear UI indications for stage completion

2. PHI Disclaimer

- Prominent, clear caution/disclaimer box at the start of every chat interaction:
 - Emphasize doctors' responsibility to avoid entering PHI
 - Legally vetted disclaimer phrasing for clarity and liability limitation

3. Chat-Based Workflow & Interaction

- **Clear Stage Definition:** Reduce workflow complexity to 3-5 clearly abstracted, intuitive stages:
 1. **Patient Information Entry:**
 - Secure, easy-to-use forms avoiding PHI
 - Backend extraction, causal analysis, and validation executed automatically
 - Immediate feedback and queries on missing information
 2. **Diagnosis Generation:**
 - Automatic backend re-validation after additional data entry
 - Real-time display that sufficient data is available or highlight missing information
 - Concise final diagnosis with optional expanded details in reasoning trace
 - Approval buttons: "Approve" or "Require Changes"
 3. **Treatment Planning and Customization:**
 - Concise treatment recommendations displayed prominently
 - Detailed reasoning and optional exploration in the reasoning panel
 - Final approval prompts for doctors, with clear "Approve" or "Modify" buttons
 4. **Note Generation & PDF Synthesis:**
 - Generate structured clinical notes with clearly defined sections (Subjective, Objective, Assessment, Plan)
 - Ability to export notes as PDFs securely
 - No PHI included in exported documents

4. Interaction Clarity and Responsiveness

- Prompt clear requests for missing or additional patient information
- Real-time updates and feedback after doctor inputs
- Always available "chat" and "question" options without forcing premature progression
- Include intuitive UI elements for immediate management-related doctor queries

5. Data Security and Encounter Management

- Secure, clearly defined "End Encounter" and "Start New Encounter" buttons
- Log encounters securely without PHI, accessible for historical reference

Detailed Technical and Functional Descriptions

UI Elements

- **Main Chat Area:**
 - Dynamic, intuitive interactions clearly distinguishing input and output
 - Expandable input field, optional attachments, and formatting support

- **Reasoning Trace Panel:**
 - Toggle-able detailed breakdowns of backend processing
 - Color-coded clarity for different reasoning types
 - Optional deep-dive details and downloadable reasoning logs
- **Conversation History Panel:**
 - Collapsible with search, rename, export, and delete capabilities
- **Approval & Transition Controls:**
 - Prominent, color-coded buttons for clear stage approval
 - Instantaneous stage updates visible through progress indicators

Functional Backend Capabilities

- **Automated Reasoning Steps:**
 - Robust causal inference logic and validation checks in backend
 - Counterfactual reasoning clearly structured and communicated
- **Real-time Data Handling:**
 - Live backend data synchronization with UI elements
 - Immediate feedback loop for entered patient information
- **Clinical Note Generation:**
 - Standardized medical summary generation with no PHI included
 - Detailed breakdown including vitals, assessment, diagnosis reasoning, and treatment planning

Compliance and Legal Considerations

- Clear disclaimer text legally validated to emphasize no PHI entry
- Secure data handling compliant with healthcare industry standards (HIPAA/GDPR)

This comprehensive analysis defines the core MVP requirements clearly, addresses priority feedback, and prepares a solid foundation for further iterations and scalable development.