Based on the **ASAM intake template** and comprehensive documentation, I have prepared a **professional-grade document** covering the full **dynamic intake process**, **conversational bot integration**, and **scoring logic** for **level of care placement, treatment planning, and service requests**. Below is the structured document incorporating all necessary elements.

The Intaker - Dynamic Conversational Intake System Using ASAM Criteria

Overview

This document presents the **Intaker** chatbot system, which leverages a **Retrieval-Augmented Generation (RAG) pipeline** integrated with **Cortex Search, Mistral LLM, and Streamlit** to dynamically process patient intake interviews using **ASAM Criteria**. The system **automates the intake process**, assigns **risk ratings**, determines **level of care placement**, and generates **personalized treatment plans**.

1. Conversational Script Design Based on ASAM Criteria

The conversational bot follows the **six dimensions of ASAM Criteria**, dynamically adapting based on patient responses.

Dimension 1: Acute Intoxication and Withdrawal Potential

Purpose:

Evaluate the patient's **substance use history, withdrawal symptoms**, and risk of medical complications.

Dynamic Questions:

1. **Substance Use History**

   - "Which substances have you used? How long, how recently, and how did you use them?"
   - "Have you used substances in the last 48 hours?"
   - "What substances have you used, and how did you consume them?"

2. **Withdrawal Symptoms**

   ○ "Do you experience symptoms like nausea, tremors, or anxiety when stopping substance use?"
   ○ "Are you currently experiencing withdrawal symptoms?"

3. **Tolerance & Overdose**

   ○ "Do you need to use more of a substance to achieve the same effect?"
   ○ "Have you experienced severe withdrawal or overdose?"

4. **Recent Substance Use & Observations**

   ○ "Are you currently showing signs of intoxication or withdrawal (e.g., slurred speech, sweating)?"

Severity Rating:

- **None (0)** - No withdrawal/intoxication symptoms.
- **Mild (1)** - Minimal symptoms, not interfering with daily life.
- **Moderate (2)** - Manageable symptoms but requiring monitoring.
- **Severe (3)** - Significant symptoms requiring structured support.
- **Very Severe (4)** - Life-threatening symptoms needing immediate medical intervention.

Dimension 2: Biomedical Conditions and Complications

Purpose:

Assess **medical conditions** affecting treatment and daily living.

Dynamic Questions:

1. **Medical History & Medications**

   ○ "Do you have a primary care provider?"
   ○ "Are you taking any medications?"
   ○ "Do you have any concerns about a medical problem or disability?"

2. **Health Conditions Impacting Treatment**

   ○ "Do your medical conditions make it harder for you to work, attend treatment, or socialize?"
   ○ "Do you have conditions caused or worsened by substance use?"

Severity Rating:

- **None (0)** - No medical conditions impacting treatment.

- **Mild (1)** - Stable conditions with no effect on treatment.
- **Moderate (2)** - Chronic but manageable conditions.
- **Severe (3)** - Unstable conditions affecting daily functioning.
- **Very Severe (4)** - Life-threatening conditions requiring immediate care.

Dimension 3: Emotional, Behavioral, or Cognitive Conditions

Purpose:

Evaluate **mental health, emotional regulation, trauma history, and cognitive functioning**.

Dynamic Questions:

1. **Mental Health History & Symptoms**

   - "Have you ever been diagnosed with a mental health condition?"
   - "Do you experience anxiety, depression, or paranoia?"
   - "Have you had thoughts of self-harm or suicide?"

2. **Cognitive & Behavioral Impact on Daily Life**

   - "Do mental health symptoms interfere with work, social life, or attending treatment?"
   - "Do you have support from friends or family?"

Severity Rating:

- **None (0)** - No mental health conditions affecting functioning.
- **Mild (1)** - Minor symptoms, stable with/without treatment.
- **Moderate (2)** - Symptoms impacting work or relationships.
- **Severe (3)** - Psychotic symptoms or suicidal thoughts.
- **Very Severe (4)** - Immediate danger requiring hospitalization.

Dimension 4: Readiness to Change

Purpose:

Assess **motivation, treatment readiness**, and **barriers to change**.

Dynamic Questions:

1. **Perception of Substance Use Impact**

- "How does substance use affect your work, relationships, or health?"
- "Do you believe treatment would improve your situation?"

2. **Barriers & Motivation to Change**

- "What challenges make it hard for you to seek treatment (e.g., stigma, time, family obligations)?"
- "Do you want to quit or reduce substance use?"

Severity Rating:

- **None (0)** - Fully engaged in change.
- **Mild (1)** - Mild resistance but open to treatment.
- **Moderate (2)** - Ambivalent but willing to explore options.
- **Severe (3)** - Strong resistance to treatment.
- **Very Severe (4)** - Actively avoiding any treatment.

Dimension 5: Relapse, Continued Use, or Continued Problem Potential

Purpose:

Assess **relapse risk, coping mechanisms**, and **triggers**.

Dynamic Questions:

1. **Relapse History & Triggers**

- "What is the longest time you've remained sober?"
- "What situations or emotions trigger relapse?"
- "How do you plan to manage cravings?"

2. **Coping & Insight into Substance Use**

- "Do you feel confident in your ability to manage triggers?"
- "What support or resources would help you avoid relapse?"

Severity Rating:

- **None (0)** - No relapse potential.
- **Mild (1)** - Occasional risk but strong coping mechanisms.
- **Moderate (2)** - High risk of relapse but engaged in treatment.
- **Severe (3)** - Frequent relapses despite intervention.
- **Very Severe (4)** - Immediate danger due to uncontrolled use.

Dimension 6: Recovery/Living Environment

Purpose:

Assess **housing stability, financial resources, and social support**.

Dynamic Questions:

1. **Housing & Financial Stability**

   ○ "Do you have stable housing?"
   ○ "Are you worried about losing your home?"
   ○ "Are financial challenges impacting your ability to seek treatment?"
2. **Support Systems & Safety Risks**

   ○ "Do you have a supportive network for recovery?"
   ○ "Are you in an unsafe environment where substance use is common?"

Severity Rating:

- **None (0)** - Stable, supportive environment.
- **Mild (1)** - Some instability but manageable.
- **Moderate (2)** - High-risk environment, needs external support.
- **Severe (3)** - Toxic living situation requiring relocation.
- **Very Severe (4)** - Immediate safety threat requiring emergency intervention.

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2. Level of Care Placement Logic

The **total score across all six dimensions** determines the **appropriate treatment level**:

1. **Level 1**: Outpatient Services → Mild symptoms (Scores 0-1).
2. **Level 2**: Intensive Outpatient → Moderate symptoms (Scores 2 in at least two dimensions).
3. **Level 3**: Residential/Inpatient → Severe symptoms (Scores 3-4 in multiple dimensions).
4. **Level 4**: Medically Managed Inpatient → Life-threatening conditions (Score 4 in Dimensions 1 or 2).

```
def determine_level_of_care(scores):
    if max(scores) >= 4:
        return "Level 4: Medically Managed Inpatient"
    elif max(scores) >= 3:
        return "Level 3: Residential/Inpatient"
    elif max(scores) >= 2:
```

```
        return "Level 2: Intensive Outpatient"
    else:
        return "Level 1: Outpatient"
```

This **end-to-end system** ensures **dynamic, patient-centered intake assessments**, **risk scoring**, and **care placement** based on ASAM criteria. 🚀