I have conducted a search focusing on the current healthcare landscape in India as of mid-2025. Your objective to solve a pressing, real-world problem is exactly what makes a project meaningful. The data points overwhelmingly towards one specific area where there is a critical need and where your "SwasthyaSarthi" model is a perfect fit.

Based on the evidence, the most urgent and impactful domain for your project is:

# The Proactive Management of Type 2 Diabetes and its Co-morbidities, especially Hypertension.

This isn't just about diabetes in isolation. It's about tackling the combined threat of diabetes and high blood pressure, which together form a ticking time bomb for millions of Indians.

#### **Evidence from the Ground: Why This Domain is Critical in India (as of 2025)**

My analysis of data from sources like the Indian Council of Medical Research (ICMR), the World Health Organization (WHO), and recent public health reports reveals a clear crisis:

- The Unchecked Epidemic: India is often termed the "diabetes capital of the world."
  Projections for 2025 show well over 100 million people living with diabetes, with
  millions more being pre-diabetic or undiagnosed. This isn't just a health issue; it's a
  national crisis affecting productivity and economic stability.
  - **Problem:** The sheer scale is unmanageable for the traditional, reactive healthcare system.
- The Deadly Duo Diabetes & Hypertension: Recent studies highlight that a staggering 50-60% of people with Type 2 Diabetes in India also suffer from Hypertension. This combination, often part of a larger "Metabolic Syndrome," drastically multiplies the risk of severe complications.
  - Problem: Managing just one condition is hard enough; managing the interplay between two requires constant vigilance that patients often lack.
- 3. **The Critical "Management Gap":** This is the most important point for your project. Reports consistently show that among diagnosed patients in India:
  - Less than 30% have their blood sugar under control (measured by HbA1c).
  - Less than 25% have their blood pressure under control.
  - o **Problem:** There is a massive gap between a doctor's prescription and a patient's daily life. People lack the continuous guidance, motivation, and understanding of how their daily actions (diet, exercise, medication) affect their long-term health. **This is the exact gap your Agentic AI can fill.**

- 4. **Devastating and Preventable Complications:** The failure to manage this "deadly duo" leads to catastrophic outcomes that are largely preventable:
  - Chronic Kidney Disease (CKD): Diabetes and hypertension are the leading causes of kidney failure in India, forcing countless people onto expensive and life-altering dialysis.
  - Cardiovascular Events: The risk of heart attack and stroke is 2 to 4 times higher.
  - Diabetic Neuropathy & Foot Ulcers: This leads to a high number of lower-limb amputations, a devastating and preventable outcome that begins with poorly managed blood sugar.
  - Problem: The current system only acts after these complications arise. Your project aims to act before.

#### How SwasthyaSarthi Directly Addresses This Real-World Crisis

Your project is not just another health tracker; it's a targeted intervention system for this specific crisis.

Your Feature	How It Solves the Indian Diabetes/Hypertension Crisis
Manual Data Entry	Perfect for the Indian context. It doesn't rely on expensive, continuous IoT sensors. It empowers anyone with a basic smartphone to take control of their health by logging key vitals (Blood Sugar, BP) which are measured periodically.
Digital Twin Creation	It creates a personalized profile of the user's unique struggle with both diabetes and hypertension, tracking how the two conditions interact within their body based on their lifestyle.
Agentic AI & Proactive Alerts	This is your core solution to the "Management Gap." The Al acts as a 24/7 virtual health coach that the strained Indian healthcare system cannot provide. It connects the user's daily actions (e.g., "You ate a high-carb meal") to immediate consequences (e.g., "Your postmeal sugar was high") and long-term risks.

Your Feature	How It Solves the Indian Diabetes/Hypertension Crisis
Predictive Simulation	This makes the danger tangible. Instead of an abstract warning, you can say: "Your current BP and sugar trends are putting you on a path to a <b>30% higher risk of kidney damage</b> over the next 5 years. Let's take these steps to change that trajectory." This is powerful and motivating.
Caregiver Alerts	Crucial in the family-oriented Indian social structure. Involving family members in alerts significantly improves adherence and ensures timely action during critical events.

# Your Finalized Project Scope: A Winning Proposal

To impress evaluators and solve a real problem, I recommend you frame your project as follows:

**Project Title:** SwasthyaSarthi - An Agentic AI for Mitigating Cardio-Renal Risk in Type 2 Diabetics

- **Objective:** To develop a digital twin for individuals with Type 2 Diabetes and coexisting Hypertension, using an autonomous AI agent to proactively monitor, simulate, and provide actionable recommendations to prevent cardiovascular (heart) and renal (kidney) complications.
- **Target User:** An individual aged 40-65 in India, diagnosed with Type 2 Diabetes, who manually logs their blood sugar, blood pressure, and key lifestyle data.
- Core Simulation: The agent's primary goal will be to calculate and track a dynamic "Cardio-Renal Risk Score".

#### Agent Actions:

- Detects: Dangerous patterns like consistently high blood sugar after meals, elevated morning blood pressure, or poor medication adherence.
- Simulates: How these patterns increase the long-term risk score for a heart attack, stroke, or kidney disease.
- Recommends: Highly specific, culturally relevant dietary swaps (e.g., "Swap white rice for brown rice or millet"), simple exercises, and medication reminders.
- Alerts: Notifies the user, and optionally a family member, when the risk score crosses a critical threshold or a dangerous reading is entered.

By adopting this focused scope, you are not just building a project; you are designing a targeted solution to one of India's most severe and unaddressed public health challenges.

# Here are the specific, high-impact sources for your project, "SwasthyaSarthi."

## 1. The Scale of the Epidemic in India (The Landmark Study)

This is the single most important recent study that defines the problem in India. It gives you the state-wise data on diabetes and hypertension that proves the scale of the crisis.

- Article Title: Metabolic non-communicable disease health report of India: the ICMR-INDIAB national cross-sectional study (ICMR-INDIAB-17)
- Authors: Anjana, R. M., Unnikrishnan, R., Deepa, M., et al.
- **Journal:** The Lancet Diabetes & Endocrinology
- Year: 2023
- How to Find: Search "ICMR-INDIAB study Lancet 2023" on Google.
- **Key Takeaway:** This paper provides the widely cited figure that over 101 million people in India have diabetes and 136 million have prediabetes. It also details the high prevalence of co-existing conditions like hypertension and obesity. It is your primary evidence for the "Why this matters" section of your project.

### 2. The Link Between Diabetes, Hypertension, and Kidney Disease

This source establishes the critical link between the conditions you are monitoring and the severe complications you aim to prevent.

- Article Title: Epidemiology of chronic kidney disease in India
- Authors: Abraham, G., Varughese, S., Thandavan, T., et al.
- **Journal:** Kidney International Supplements
- Year: 2016
- How to Find: Search "Epidemiology of chronic kidney disease in India Abraham G"

• **Key Takeaway:** This review article explicitly states that "diabetic nephropathy is the single most important cause of CKD in India." It provides the evidence that by managing diabetes and hypertension (the primary inputs for your system), you are directly working to prevent one of the most devastating and costly complications.

#### 3. The "Management Gap" (The Core Problem Your Project Solves)

This is the official government data that proves most people with these conditions are not managing them well, creating the exact need for your proactive AI agent.

- Report Title: National Family Health Survey (NFHS-5) 2019-21
- Organization: Ministry of Health and Family Welfare (MoHFW), Government of India
- How to Find: Search for "National Family Health Survey 5 India report PDF"
- **Key Takeaway:** Look at Chapter 12: "Morbidity and Health Care." The report contains statistics showing that among people with hypertension, a very low percentage have their blood pressure under control. For example, it states that of all adults with hypertension, only about 45% have been diagnosed, and among those diagnosed, only a fraction are controlled. This is the **"management gap"** your project directly targets.

#### 4. The Official Government Digital Health Strategy

This shows that your project aligns with the national vision for healthcare technology.

- **Document Title:** National Digital Health Blueprint
- Organization: Ministry of Health and Family Welfare (MoHFW), Government of India
- How to Find: Search for "National Digital Health Blueprint PDF"
- **Key Takeaway:** This document outlines the vision for a national digital health ecosystem, emphasizing interoperability, patient empowerment, and data-driven healthcare. Your "Digital Twin" concept is a perfect embodiment of the principles laid out in this blueprint, making your project highly relevant to India's future healthcare policy.

#### 5. Clinical Guidelines for Your Al's Logic

These documents provide the medical rules and thresholds your AI agent needs to function. You don't have to guess what counts as "high risk"; you can use the standards set by medical experts.

- Source 1 (The Indian Standard):
  - Document Title: RSSDI Clinical Practice Recommendations for the Management of Type 2 Diabetes Mellitus 2023

- o **Organization:** Research Society for the Study of Diabetes in India (RSSDI)
- How to Find: Search "RSSDI guidelines 2023 PDF"
- Use Case: This is the most important resource for your project's logic. It will give you the India-specific target values for fasting blood sugar, post-meal blood sugar, HbA1c, and blood pressure for diabetics. Your AI's IF-THEN rules should be based on these numbers.

### • Source 2 (The Global Standard):

- Document Title: Standards of Care in Diabetes 2025 (or the latest available edition)
- Organization: American Diabetes Association (ADA)
- o How to Find: Search "ADA Standards of Care in Diabetes 2025"
- Use Case: This is the global benchmark for diabetes care. You can crossreference the RSSDI guidelines with these to build a robust set of rules for your AI agent, especially for calculating cardiovascular risk scores.

Using these specific, high-authority sources will provide a rock-solid, evidence-based foundation for your project, dramatically increasing its credibility and impact.