How SHAAADOWSSS is better:

- **Combines self-report with on-site biometrics** (BP, RBS, BMI, etc.)
- Uses a **scoring model with weightages**, not just binary answers
- Adds **environmental and lifestyle** parameters relevant to Indian settings
- Designed for **use in community health camps** with paramedic facilitation.

SHAAADOWSSS model is already thoughtfully structured and highly contextualized for Indian populations. Here are some **evidence-backed and pragmatic suggestions** to enhance the tool's sensitivity, feasibility, and long-term utility.

SHAAADOWSSS already covers major modifiable and non-modifiable stroke risk factors, the aim now should be to **enhance clinical precision, future integration potential, and research utility** — without compromising the simplicity needed for field settings.

Scoring with Weightages (as in SHAAADOWSSS)

Here, each risk factor is given a **score based on its clinical significance** or strength of association with stroke.

Risk Factor	Score Assigned	Rationale
Hypertension	3	Major independent risk factor
Diabetes	2	Strong risk, but less than HTN
Smoking	1	Significant, but lesser than above
Atrial Fibrillation	2	High cardioembolic risk
Total Score	8/21	Indicates cumulative weighted risk

Benefit: Reflects **real-life stroke risk contribution** of each factor, not just their presence.

Why Weightages Matter:

- **Hypertension and AF** carry far higher risk than, say, **obesity** or **family history**.

- A weighted model allows us to **prioritize interventions** and **stratify patients** more accurately into Low, Moderate, and High-risk groups.

In short:

Using weightages turns a basic checklist into a **scientifically meaningful prediction tool**.

PROBLEMS WITH SHAAADOWSSS

1. Binary Scoring (Yes/No = 0/1)

Risk Factor	Do You Have It?	Score
Smoking	Yes	1
Diabetes	No	0
Hypertension	Yes	1
Total Score		2/3

Problem: All risk factors are treated **equally**, regardless of their actual contribution to stroke risk.

Recommended Updates to SHAAADOWSSS for Screening Camps

1. Re-categorize Risk Factors into 3 Buckets

This improves clarity during field scoring and allows paramedics or volunteers to triage quickly.

Category	Risk Factors Included
Clinical (Red)	Hypertension, Diabetes, AF, Lipid Profile, History of TIA
Lifestyle (Orange)	Smoking, Alcohol, Obesity (BMI), Physical Inactivity, Sleep, Stress
Background/Environment (Yellow)	Age >60, Family History, Air Pollution (AQI), Others

Why: Field staff can focus efforts where clinical evaluation is essential and categorize urgency.

2. Add “Uncontrolled” Tags to Key Variables

Refine scoring by differentiating between controlled and uncontrolled conditions.

Risk Factor	Suggested Scoring Update
Hypertension	2 = Controlled, 3 = Uncontrolled (>160/100)
Diabetes	1 = Controlled (HbA1c <7), 2 = Uncontrolled
Lipid Profile	1 = Borderline, 2 = High Risk

Why: This gives more weight to unstable patients, not just their diagnosis label.

3. Revise Weight for AQI Exposure

Instead of AQI >200 (which is rare in semi-rural settings), consider:

- AQI >150 or **"Living near highways/industrial zones"**

Why: Easier as our system gives approximate AQI values

4. Standardize Scoring Interpretation

Total Score (out of 21+)	Suggested Risk Category
0–5	**Low**
6–12	**Moderate**
≥13	**High**

In recommendations, add automated referral and re-screening intervals:

- **Low:** Re-screen after 12 months
- **Moderate:** Lifestyle counselling, re-check in 6 months
- **High:** Urgent referral to partner hospital

Optional Enhancements

Suggestion	Benefit
Add "QR-coded" scoring sheet	Easy smartphone data logging
Use color-coding (Red, Yellow)	Field-friendly triage
Print SHAAADOWSSS on camp flyers	Public education + recruitment

Integration with AI/Excel Sheet	Track community trends over time

How SHAAADOWSSS can Outperform Other Scores

Feature	SHAAADOWSSS	Framingham	CHA_2DS_2-VASc	QRISK
Local lifestyle & pollution data	✅	❌	❌	❌
Sleep, circadian rhythm	✅	❌	❌	❌
Real-time camp scoring	✅	❌	❌	❌
Early disability predictors	✅	❌	❌	❌
Protective factor adjustments	✅	❌	❌	❌
Visual triage & follow-up model	✅	❌	❌	❌