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Yayasan Transformasi Kesejahteraan Bangsa

AMHASS STUDY

Modeling the Optimized Effective Coverage of Cardiometabolic Risk Management in Indonesia

3rd Consortium Meeting
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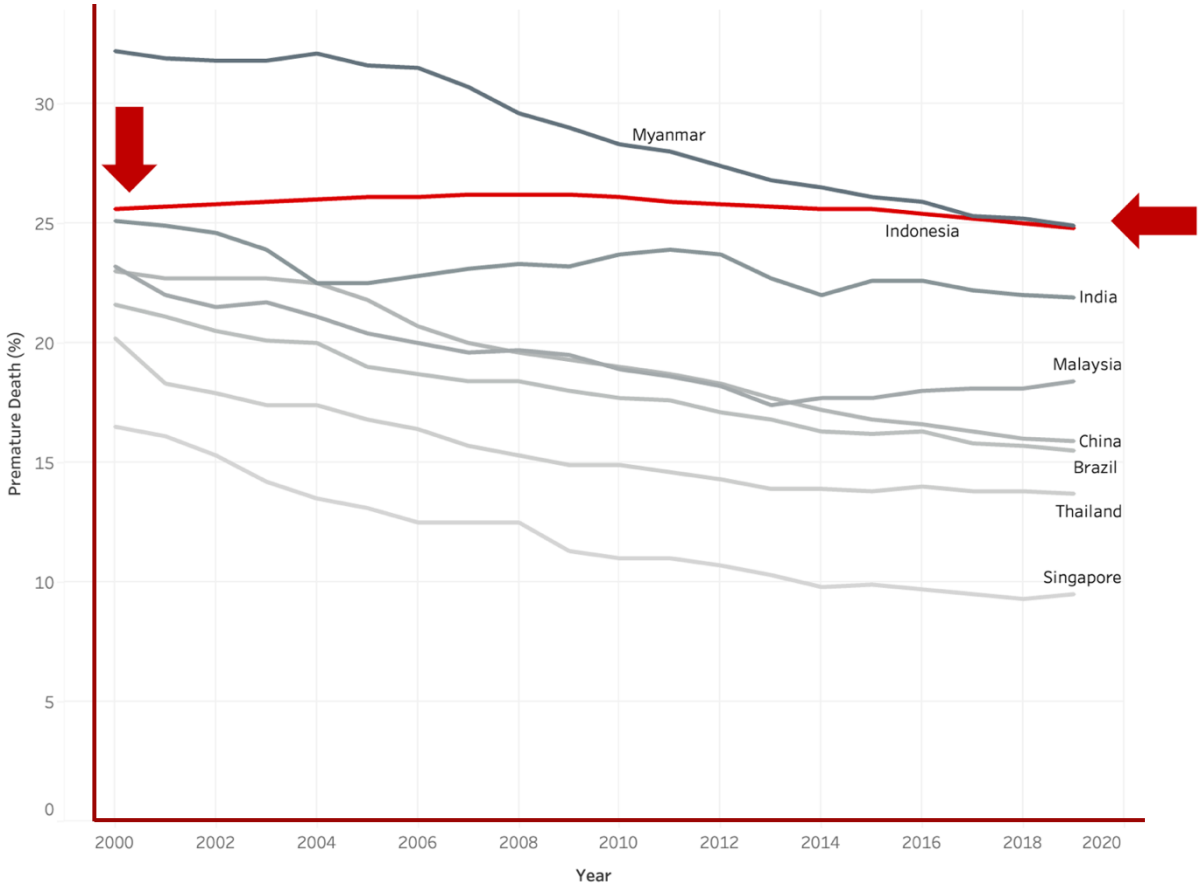
Status quo of Indonesia Performance on NCD

Probability (%) of dying between age 30 and exact age 70 from any of cardiovascular disease, cancer, diabetes, or chronic respiratory disease



Sources: WHO on SDGS Target 3.4 Monitoring

Indonesia is facing

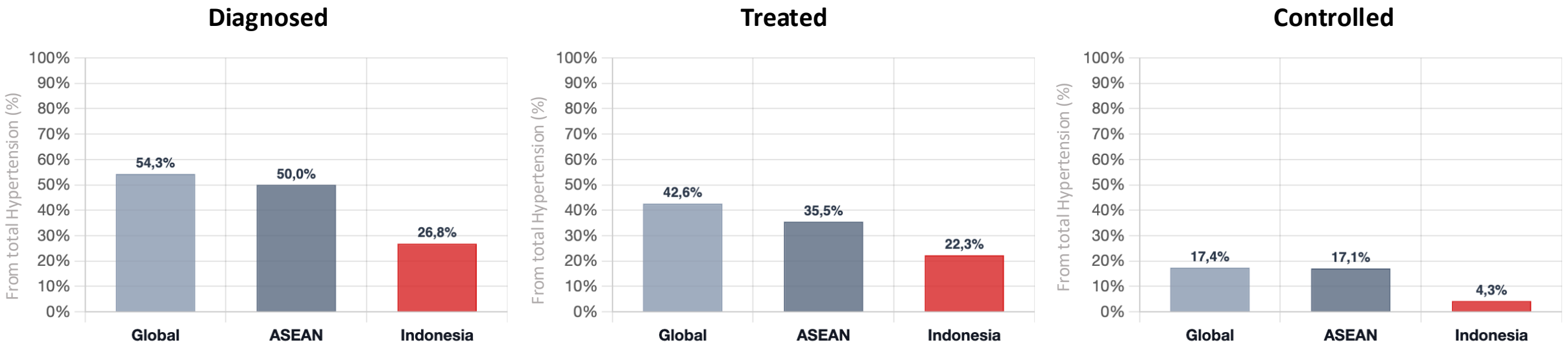
20 Years

of stagnancy in the premature death rate attributable to NCD.

Compared with Malaysia, Thailand, and India, **Indonesia's NCD burden is outpacing our health system's ability to respond.**

Global Comparison of Hypertension Care Cascade

Indonesia has fallen behind in diagnosis and control metrics.

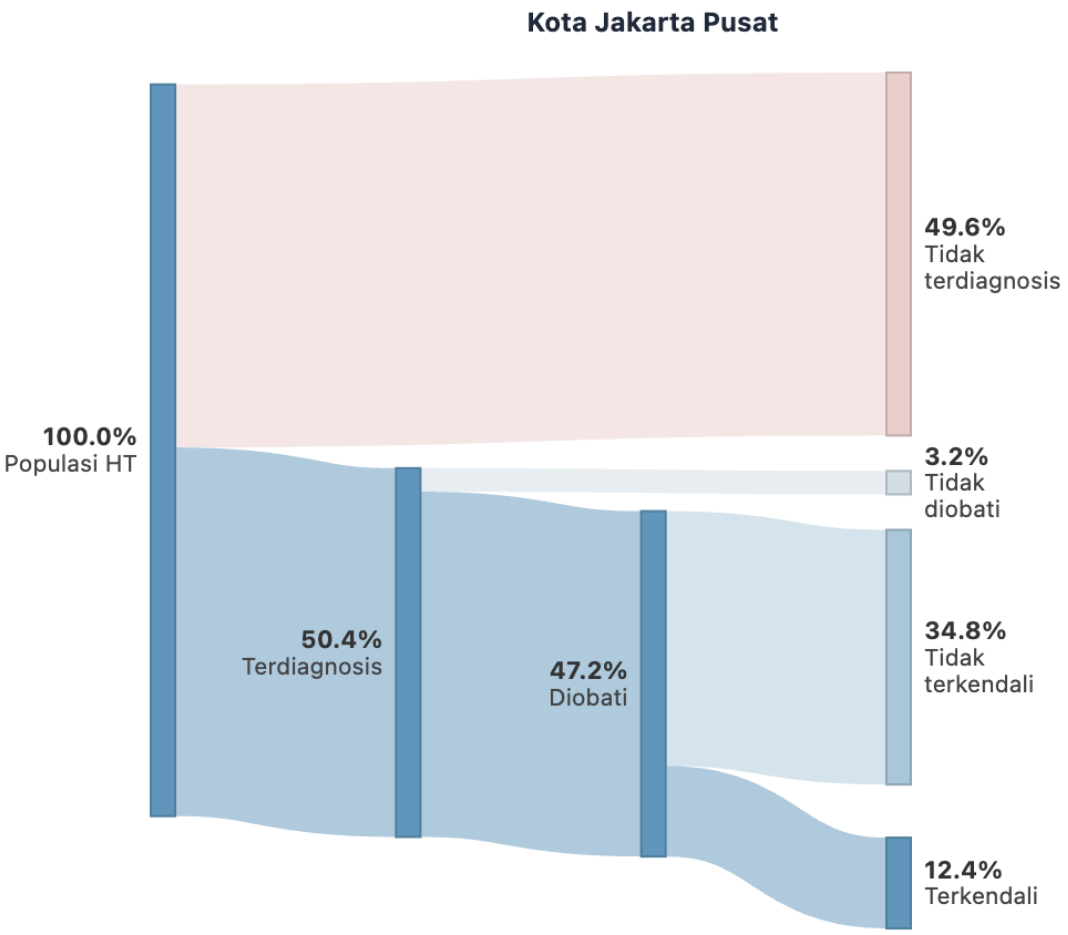


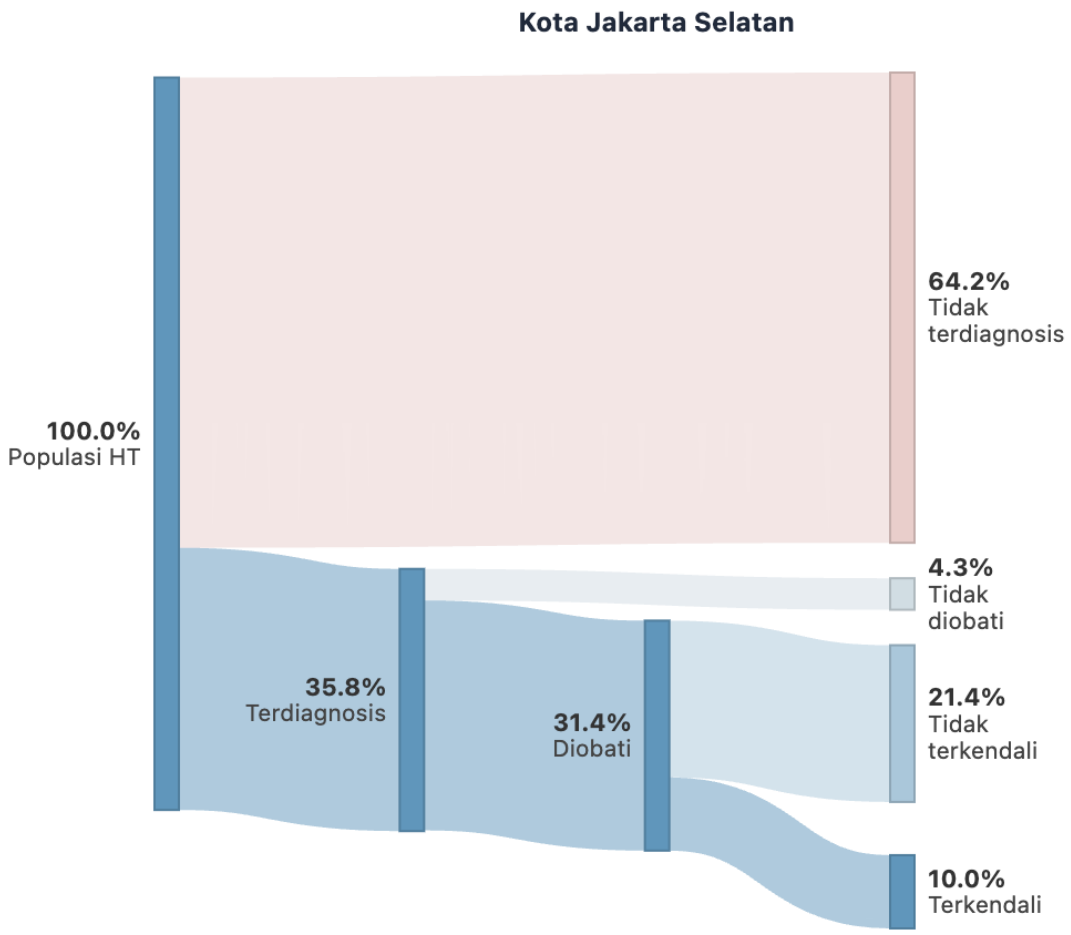
Source
Global & ASEAN: NCD-RisC 2021 Lancet (PMID 34450083), 200. countries, 30-79 age-standardized.
Indonesia: SKI, 2023

Global Expected Target: 70% Diagnosed x 70% Treated x 70% Controlled

70% diagnosed → **49%** treated → **34%** controlled

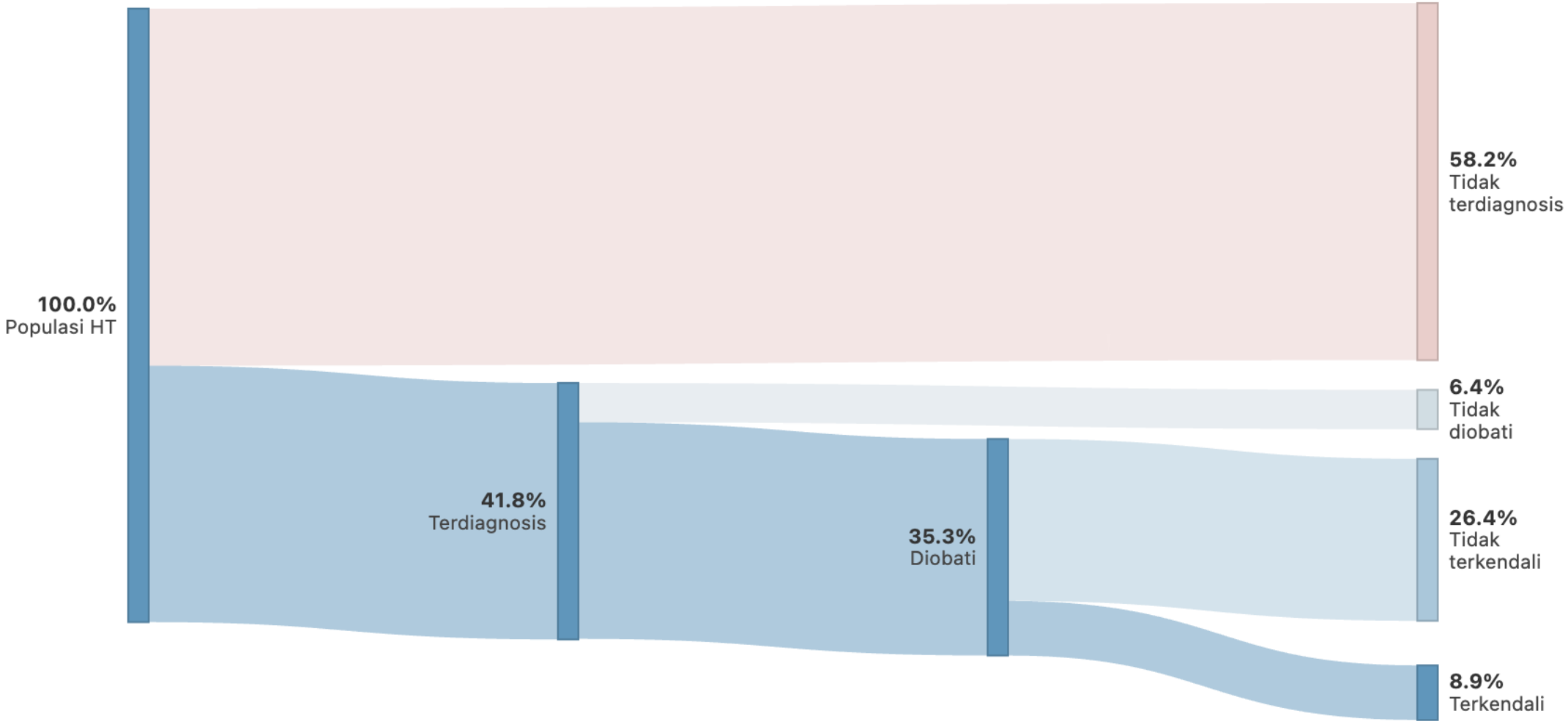
Global Comparison of Care Cascade





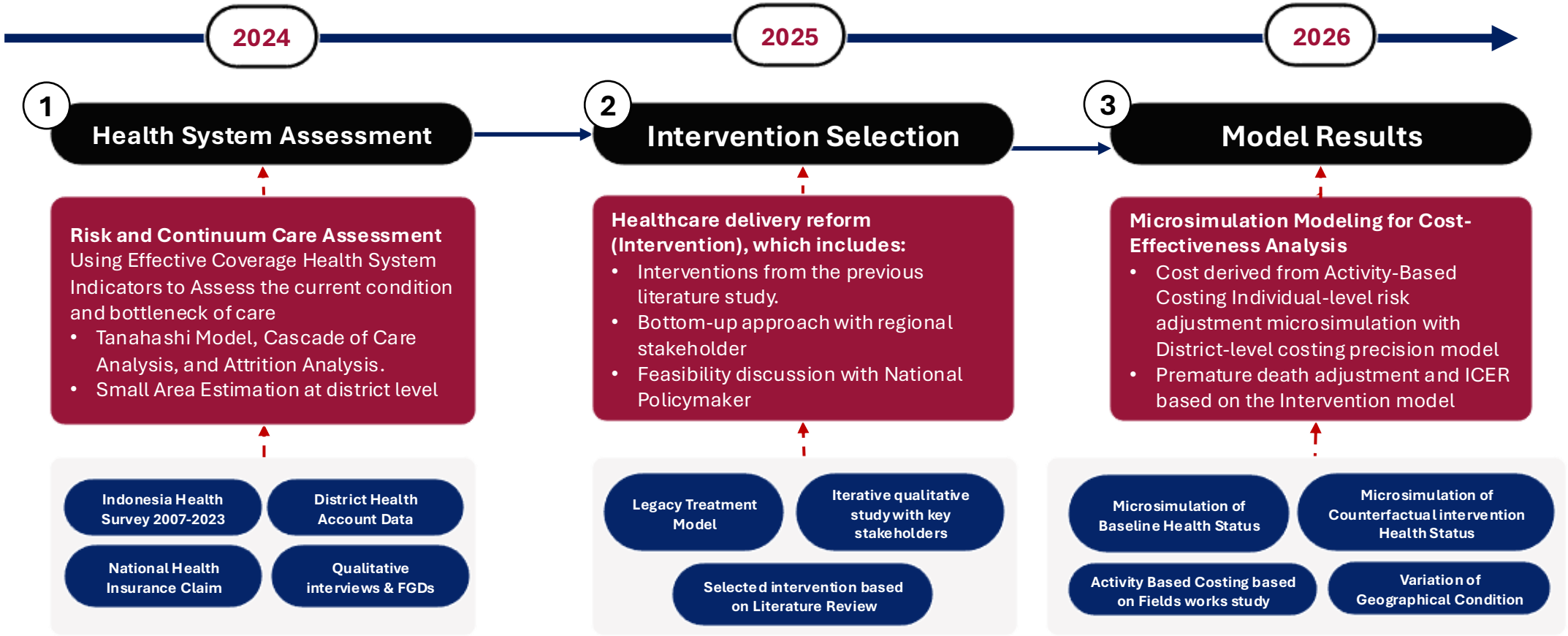
Global Comparison of Care Cascade

Care Cascade Hipertensi - Kota Bogor



Overall Objective

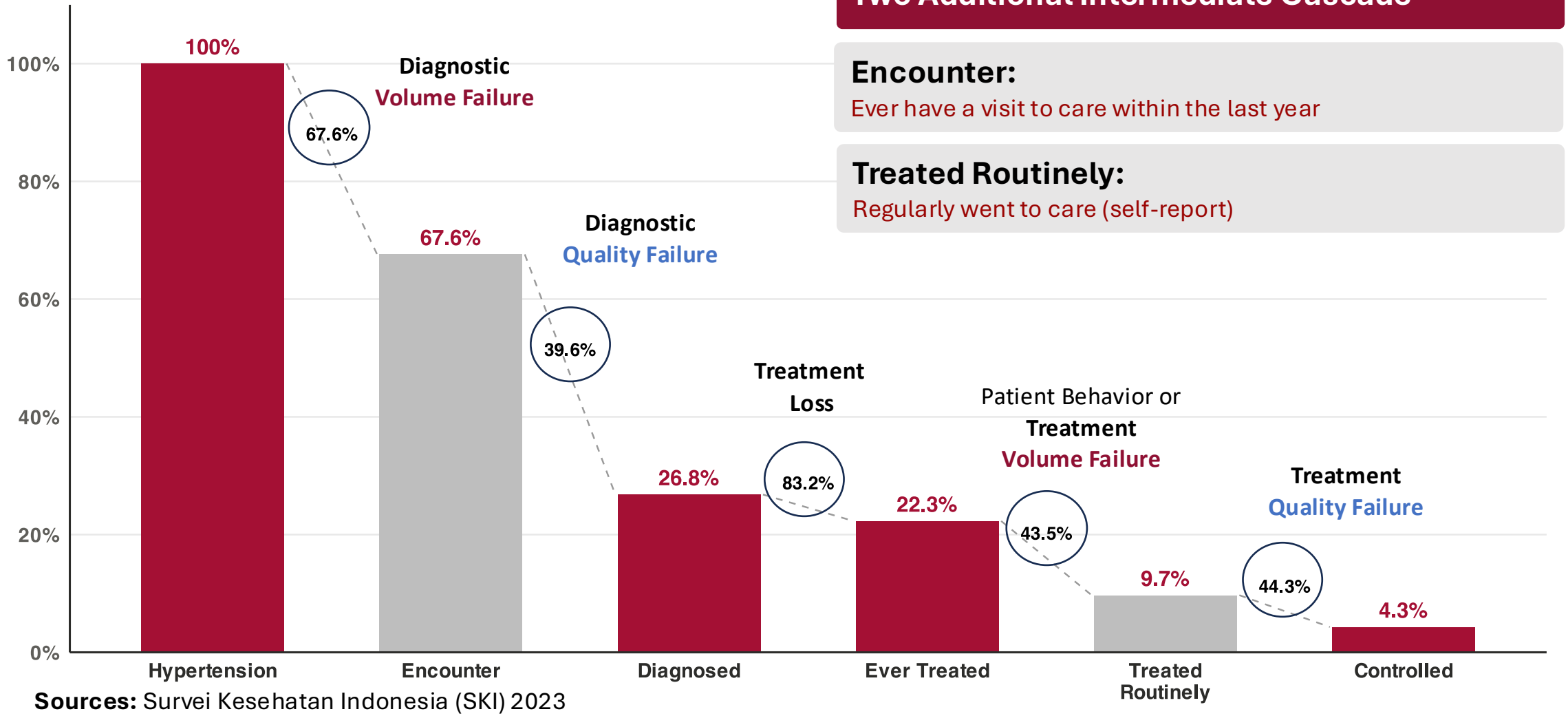
What are the possible combinations of reforms and investments that could improve the quality of care for NCDs across Indonesia, thereby reducing the burden of premature deaths and improving overall population health?



Where is Indonesia's gap?

Hypertension care cascade

Proportion of hypertensive population at each stage (%)



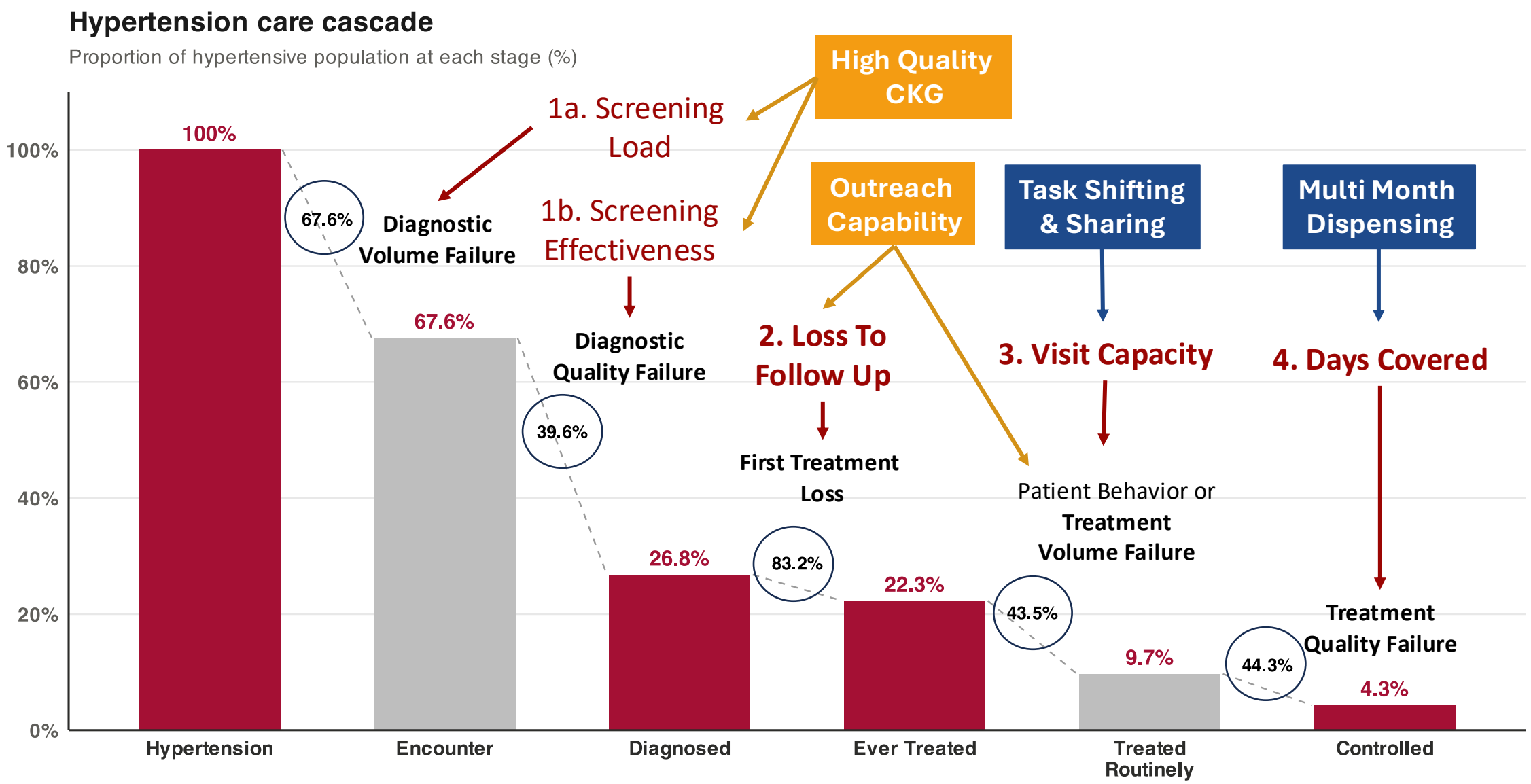
Sources: Survei Kesehatan Indonesia (SKI) 2023

Two Additional Intermediate Cascade

Encounter:
Ever have a visit to care within the last year

Treated Routinely:
Regularly went to care (self-report)

How to treat each cascade dropoff?



Interventions List Based on Literature Review

Evidence-Based Interventions Mapped into Indonesia Health System Architecture

Potential interventions based on guidance from WHO, DCP3, Lancet

Human Resources (Dirjen Nakes)
Outreach training on screening programs (community BP, glucose testing)
Task shifting and task sharing
Telehealth/remote mentoring for primary care staff

Pharmacy & Equipment (Dirjen Farmalkes)
Uninterrupted supply of essential NCD medicines
Multi-month dispensing (MMD)
HBA1c Glucometers & Lipid testing strips capability
Community-based refill points
Automated refill & reminder systems

Service Delivery (Dirjen Kesprimkom)
Massive Screening Program
Outreach Program (ILP)
CVD risk scoring management
Standardized treatment protocols for HT and diabetes
Tele-monitoring / mHealth for follow-up

Financing & Payment (Pusbikes – BPJS)
Performance-based financing for NCD indicators
Bundled Non-Capitation payments for chronic care packages
Population-Based Incentives

***Some of the interventions were implemented by the MoH and need evaluation for optimization.**

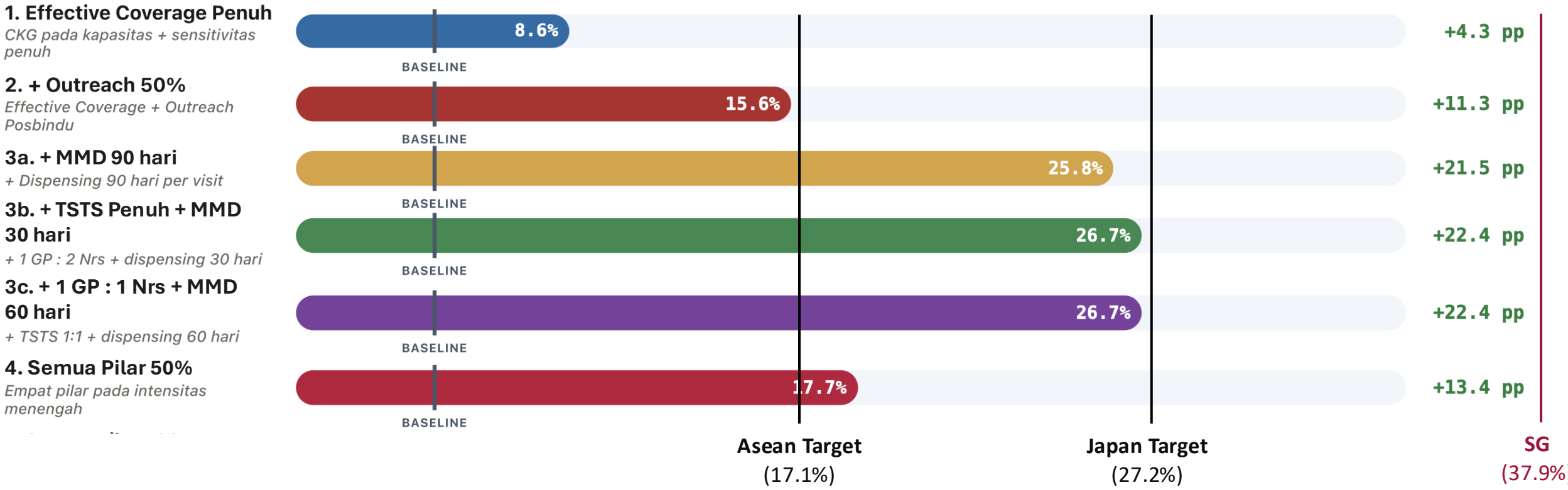
***Several interventions are within AMHASS Modelling Scenario**

Summary of Scenarios and Cascade Performances

POLICY IMPLICATION

Sustained cascade improvement requires **all intervention pillars** instead of singular interventions.

% populasi hipertensi terkendali per skenario · baseline 4.3% · panjang bar = level kontrol, marker abu-abu = baseline.



How Can We Improve Diagnoses?

*How can we boost the care cascade through **existing interventions,** particularly **2025 CKG (Free Health Screening) intervention**?*

Achievement of Free Screening Program (CKG)

One of the largest screening programs ever launched

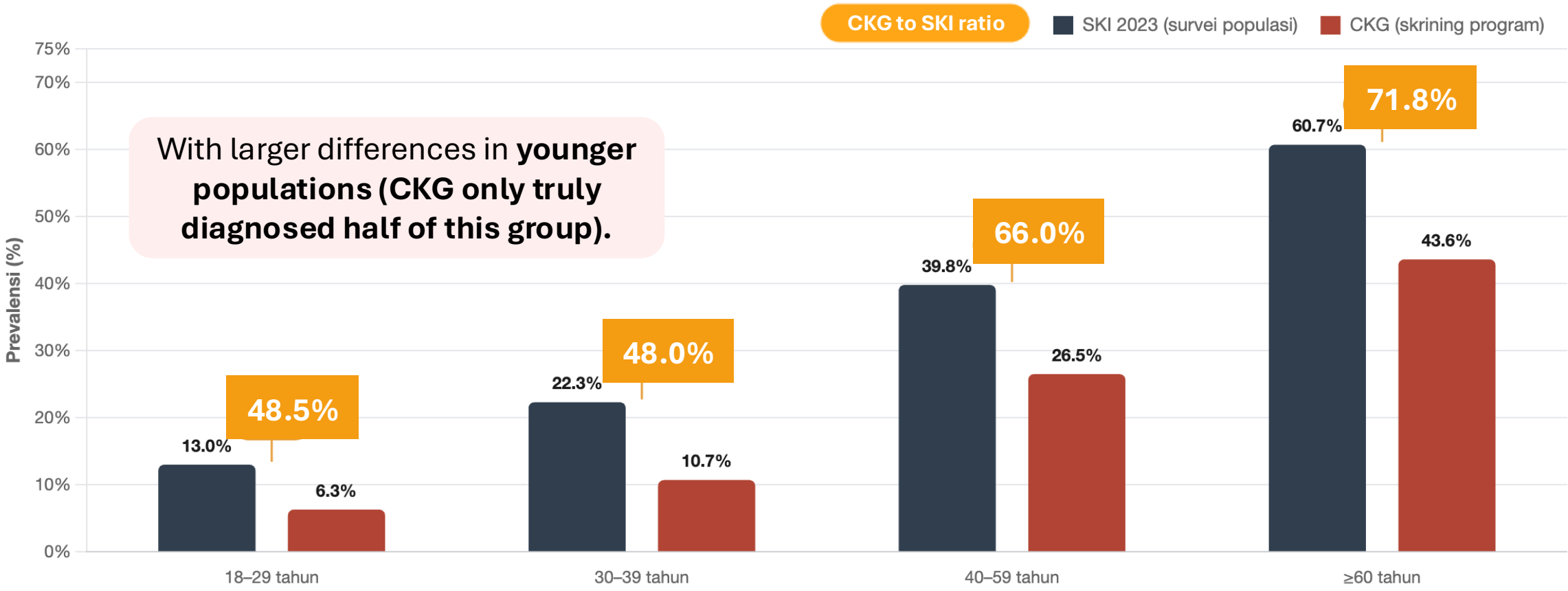
*"With a target population of approximately 280 million citizens and 100 million already screened in 15 months, the CKG program operates at a scale comparable to the combined populations of **South Korea and the United Kingdom**."*

>500k	100M	514
Per Day	**Screened by May 2026**	**Districts reached**
All Indonesian citizens	*≈ Population of the UK + South Korea*	*Nationwide coverage*

*Nur A, Harbuwono D, **Indonesia's first nationwide health screening program,** The Lancet Global Health, 2025; 13e620*

But… Are we doing “high-quality screening”?

Unfortunately, there are discrepancies between **the prevalence from National Health Survey (SKI 2023)** and **CKG Hypertension.**



Percentages show the fraction of people with HT who have already been diagnosed among the full population living with the condition.

Measuring Screening Quantity vs. Quality

Even in the best-performing province (DKI Jakarta), quality only reach 50% sensitivity.

3

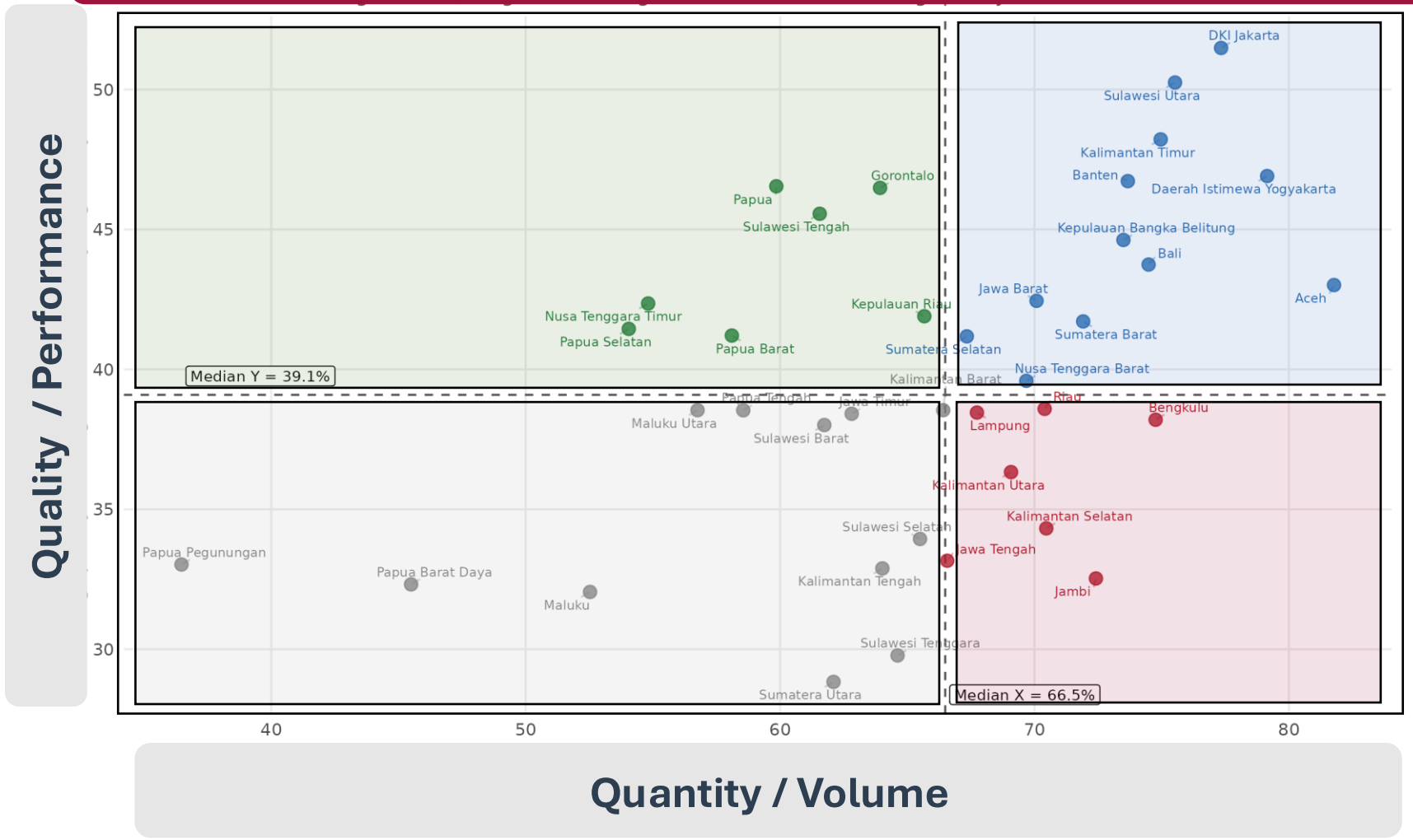
Green: Low quantity, but decent quality

Action: Increase coverage, possibly through more ambitious outreach.

1

Gray: Low quantity and quality

Action: Increase both capacity and quality.



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Blue: Decent quality and quantity

Comparatively better than other provinces

2

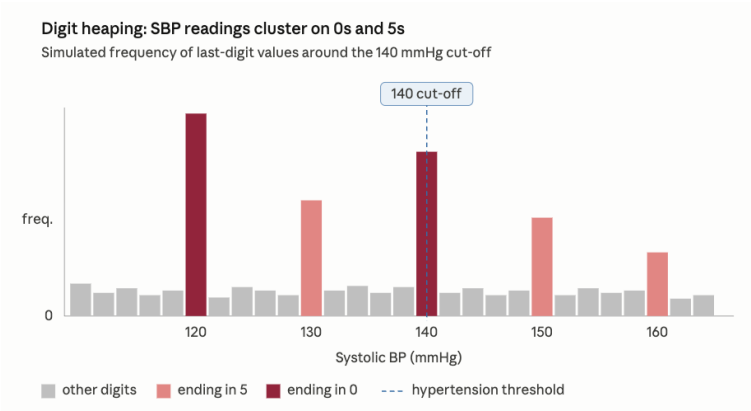
Red: Low quality, despite capacity for quantity

Action: Retrain the health workforce to increase screening quality

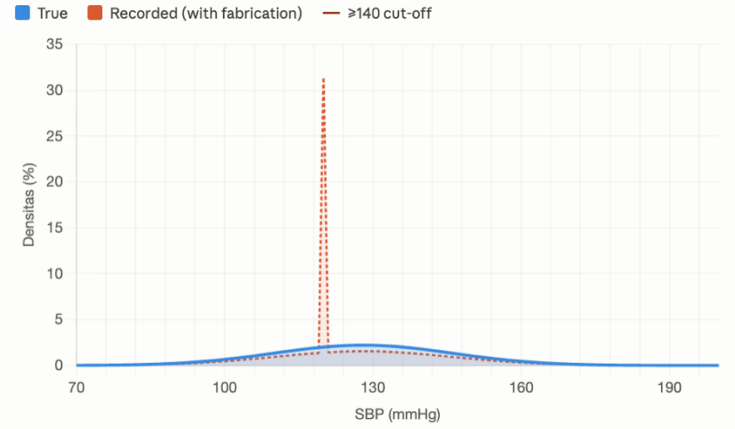
Source: AMHASS cascade HT. X = sum p_5:p_22; Y = sum p_10:p_22 / sum p_5:p_22.

Common Pitfall of Quality Diagnosis

Heaping | “Pembulatan”

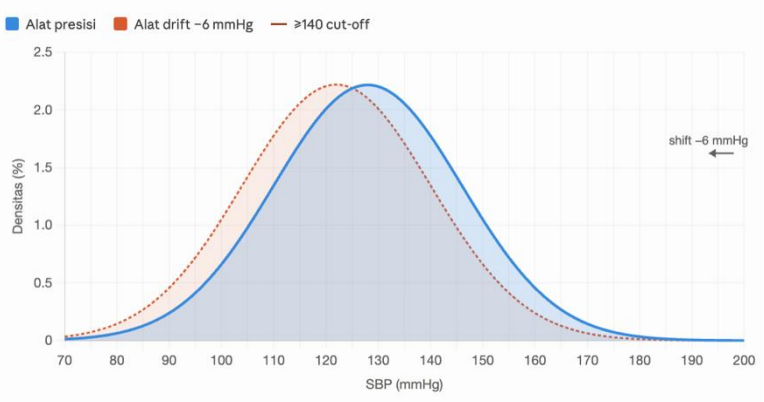


Fabrication | “Karangan”

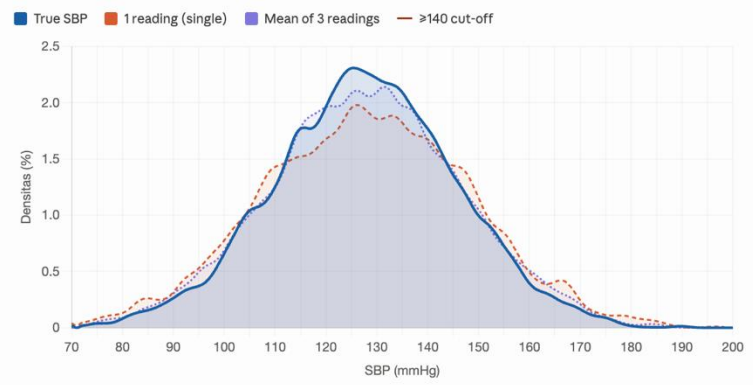


A more detailed CKG quality audit will be provided in a separate report.

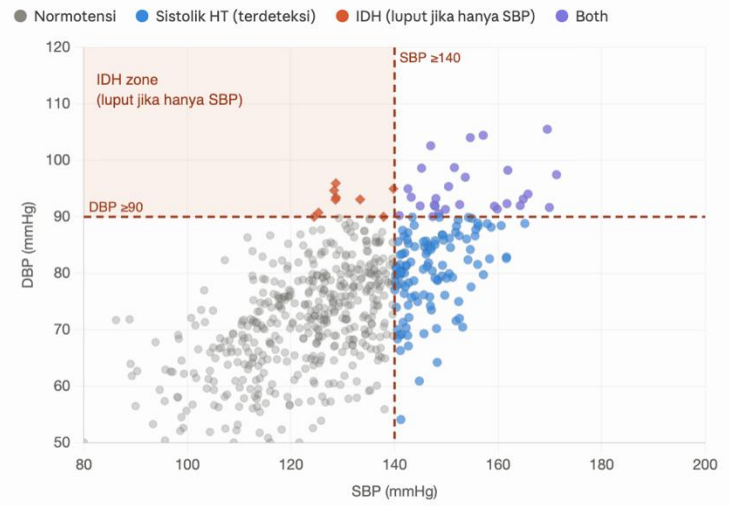
Tool Calibration



Repeated Measurements Needed

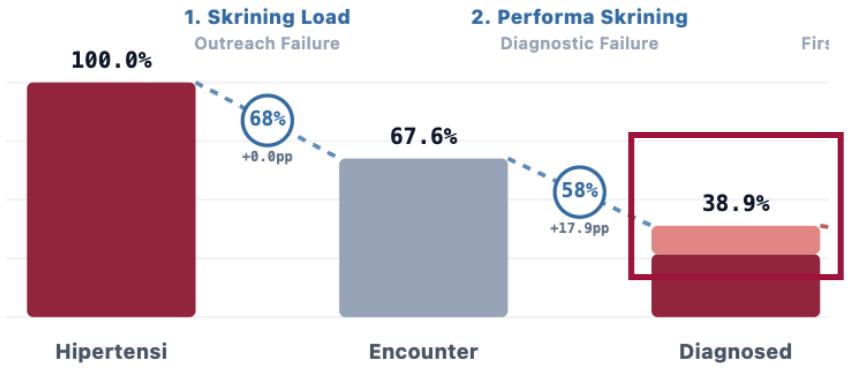


Isolated Diastolic HT



Model Diagnosis Rate with Various Performance

CKG: Business as Usual



CKG Effective Screening load + performa skrining

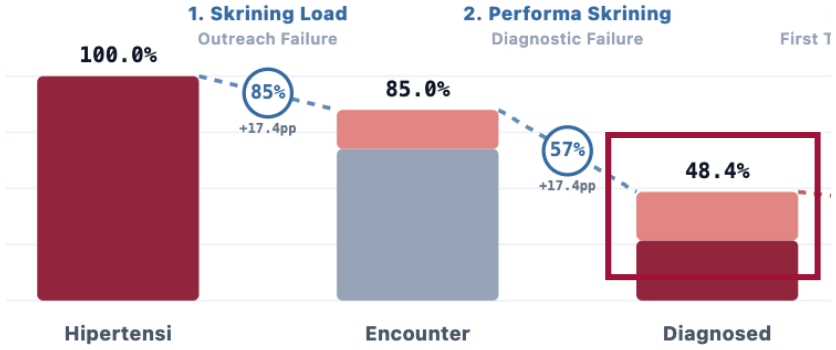
Load skrining harian `0.50 jt/hari`

0-1 juta orang per hari kerja; kondisi sekarang sekitar 0.50 jt/hari.

Performa/sensitivitas skrining `57.6%`

Kondisi sekarang: positivity CKG 19% dibanding prevalensi HT 33% = 19/33.

What if we increase the load to 1 million?



CKG Effective Screening load + performa skrining

Load skrining harian `1.00 jt/hari`

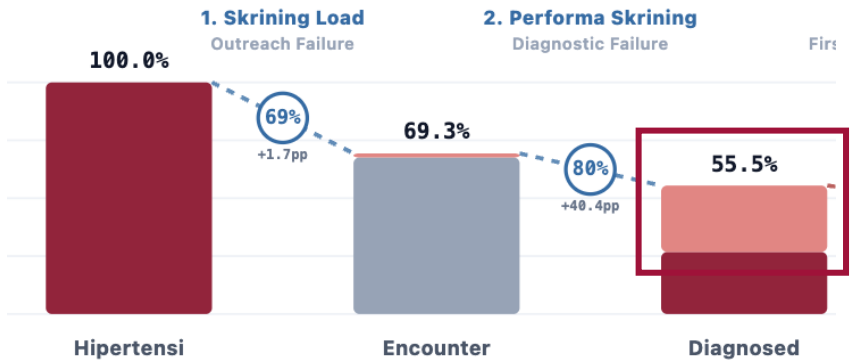
0-1 juta orang per hari kerja; kondisi sekarang sekitar 0.50 jt/hari.

Performa/sensitivitas skrining `57.0%`

Kondisi sekarang: positivity CKG 19% dibanding prevalensi HT 33% = 19/33.

Model Diagnosis Rate with Various Performance

What if we increase the quality



CKG Effective Screening load + performa skrining

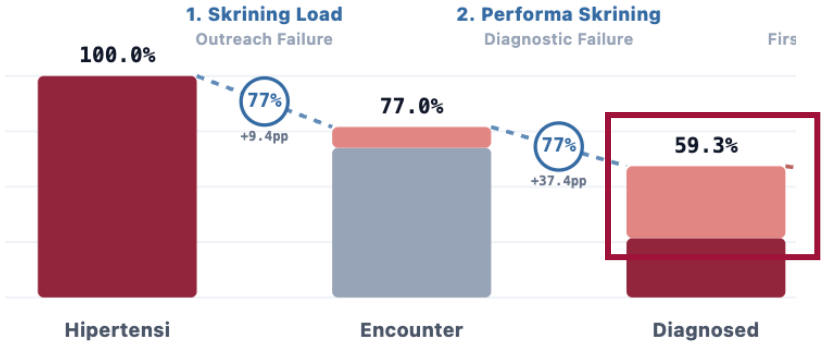
Load skrining harian `0.55 jt/hari`

0-1 juta orang per hari kerja; kondisi sekarang sekitar 0.50 jt/hari.

Performa/sensitivitas skrining `80.0%`

Kondisi sekarang: positivity CKG 19% dibanding prevalensi HT 33% = 19/33.

What if we both increase load & quality



CKG Effective Screening load + performa skrining

Load skrining harian `0.77 jt/hari`

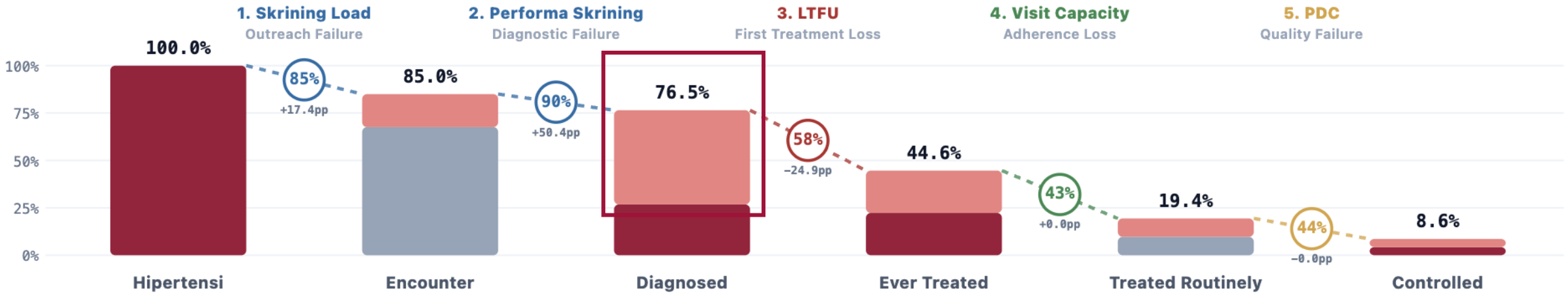
0-1 juta orang per hari kerja; kondisi sekarang sekitar 0.50 jt/hari.

Performa/sensitivitas skrining `77.0%`

Kondisi sekarang: positivity CKG 19% dibanding prevalensi HT 33% = 19/33.

Model 1: CKG Effective Screening

The impact of increased quantity and quality of CKG to the rest of care cascade:



CKG Effective Screening

CKG Effective Screening load + performa skrining

Load skrining harian 1.00 jt/hari

0–1 juta orang per hari kerja; kondisi sekarang sekitar 0.50 jt/hari.

Performa/sensitivitas skrining 90.0%

Kondisi sekarang: positivity CKG 19% dibanding prevalensi HT 33% = 19/33.

Controlled HT

8.6%

vs baseline 4.3% (**+4.3 pp**)

% populasi hipertensi terkendali per skenario · baseline 4.3% · panjang bar = level kont baseline.

1. Effective Coverage Penuh

CKG pada kapasitas + sensitivitas penuh

8.6%

Key Notes

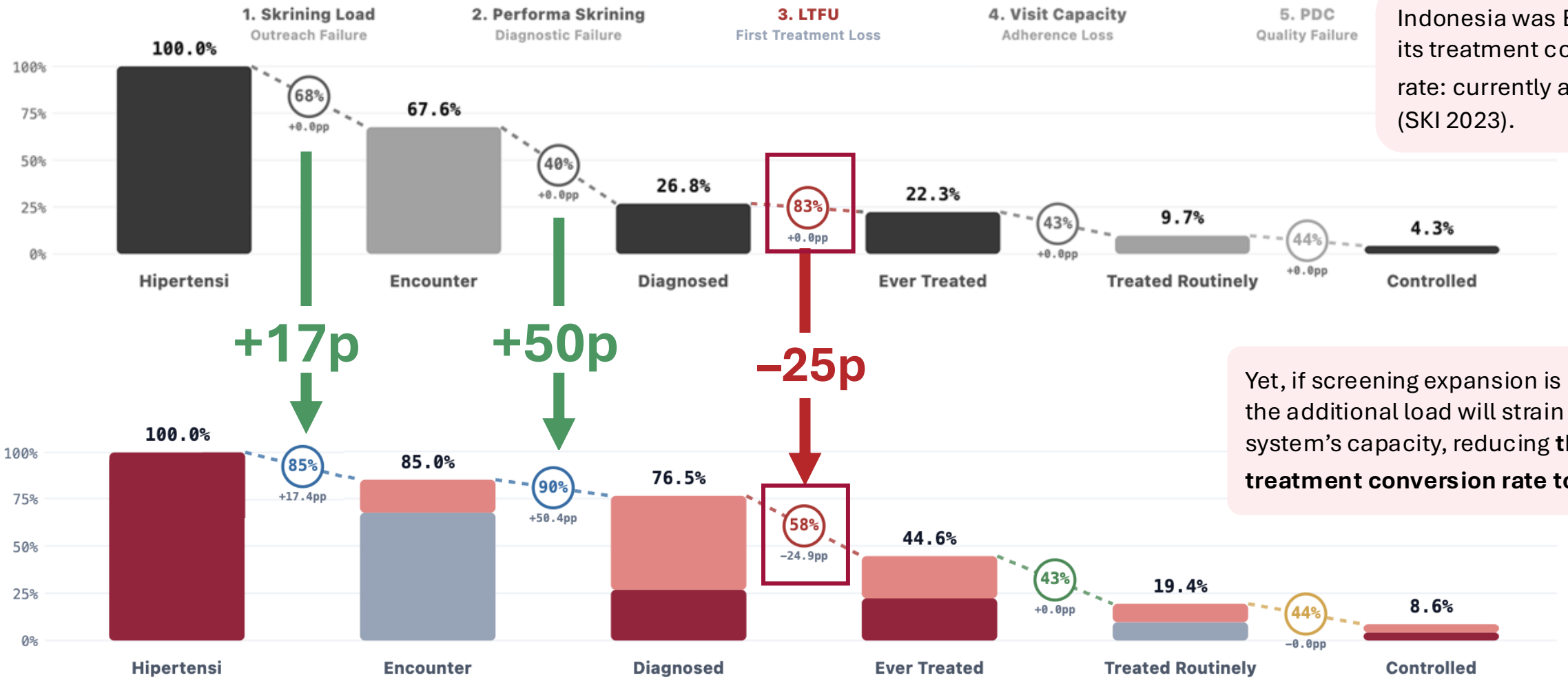
- To increase diagnoses, we need to increase the volume + and quality of **diagnoses (**sensitivity)
- However, without **retention support**, most of the gain is absorbed by the **overload penalty** in the **diagnosis → treatment conversion**.

How Can We Improve Treatment?

*How can we boost the care cascade through **existing interventions,** particularly **better outreach follow-up**?*

Treatment Performance Paradox

Diagnoses increased, but a higher patient load might not lead to proportional increases in treatment.



Indonesia was Excel in its treatment conversion rate: currently at **83%** (SKI 2023).

Yet, if screening expansion is achieved, the additional load will strain the health system's capacity, reducing **the treatment conversion rate to 58%**.

Common Treatment Pitfalls

Pharmaceutical Inertia

"Tapi kalau kami dokternya sepakat **3 kali berturut-turut (kunjungan) biar tidak turun-turun** dengan edukasi gaya hidup baru tidak ada perubahan **baru dia diberikan obat**." – *Dokter Puskesmas, Batam*

Lack of Follow-Up

"Enggak (diminta WA-nya pasien) juga sih, karena kita **screening** emang **bukan tujuannya (layanan luar gedung) mendatangkan mereka ke gedung** juga sebetulnya, kita juga belum mencatat **belum *follow up***." – *Dokter Klinik, Garut*

Knowledge-Attitude-Practice Issue

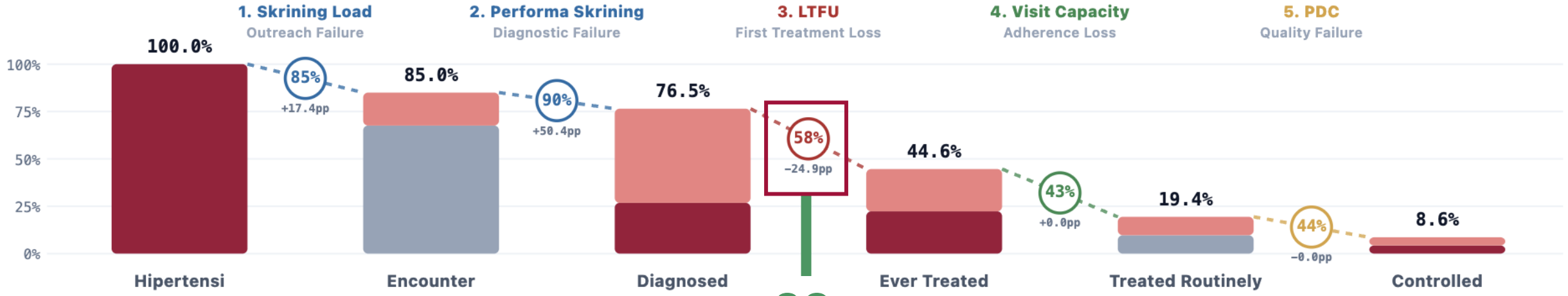
"Kenapa tidak datang? Pertama, dari sisi pasien. **Mereka merasa tidak ada keluhan, merasa sehat**." – *Kepala Puskesmas, Malang*

Financing/Insurance Coverage

"Sudah lama sudah 5 tahun saya ingat itu saya ingat (kehabisan obat) itu saya tidak ke apotik itu karena saya pikir begini saya ke teman kadang ke sana itu **beli setengah karena uang tidak cukup**. ... Uang hanya ini jadi kasih setengah nah kalau setengah kan kita mana bisa sembuh?" – *Pasien Terdiagnosis, TTS*

Model 2: CKG + Full Outreach Coverage at 50%

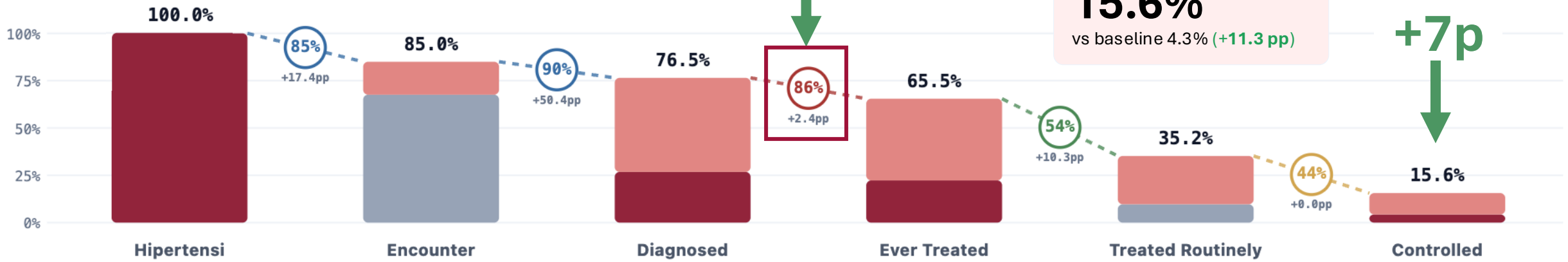
What happens if we can maintain pre-CKG conversion (83%) as the treatment load increases?



Model 2 with **outreach coverage for follow-up**

50% population coverage & retention through Posbindu

+28p



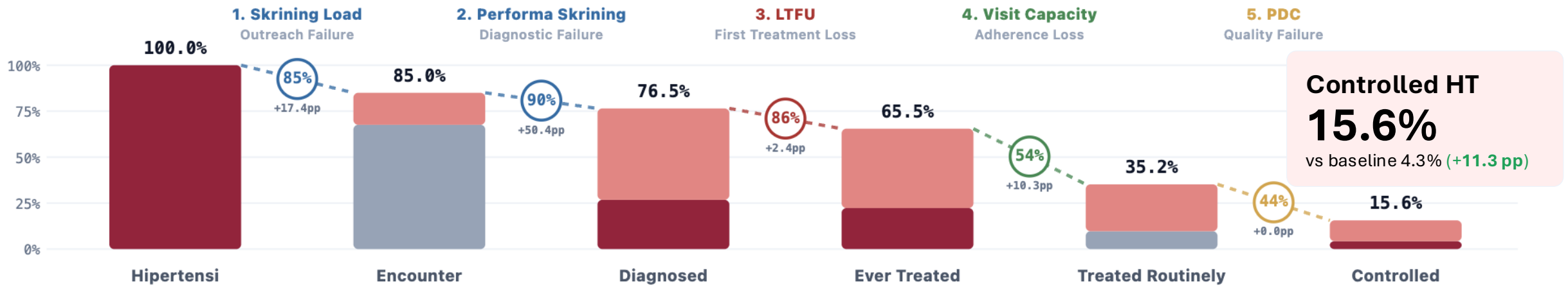
Controlled HT

15.6%

vs baseline 4.3% (+11.3 pp)

+7p

Model 2: CKG + Full Outreach Coverage at 50%



Controlled HT

15.6%

vs baseline 4.3% (+11.3 pp)

CKG Effective Screening

Outreach 50%

☑ **CKG Effective Screening** load + performa skrining

Load skrining harian 1.00 jt/hari

0-1 juta orang per hari kerja; kondisi sekarang sekitar 0.50 jt/hari.

Performa/sensitivitas skrining 90.0%

Kondisi sekarang: positivity CKG 19% dibanding prevalensi HT 33% = 19/33.

☑ **Outreach via Posbindu** coverage populasi + retensi

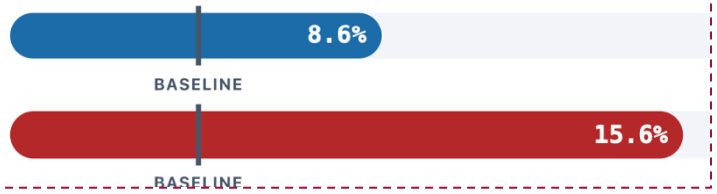
Coverage outreach populasi 50%

Maksimum 50% populasi pasien dicapai outreach/Posbindu; 50% coverage diperlakukan sebagai efek outreach penuh.

% populasi hipertensi terkendali per skenario · baseline 4.3% · panjang bar = level kont baseline.

1. Effective Coverage Penuh
CKG pada kapasitas + sensitivitas penuh

2. + Outreach 50%
Effective Coverage + Outreach Posbindu



Key Notes

Follow-up outreach alone does not add newly diagnosed patients, but it **protects the next-stage conversion** and provides a slight boost to routine visits.

Example of Interventions

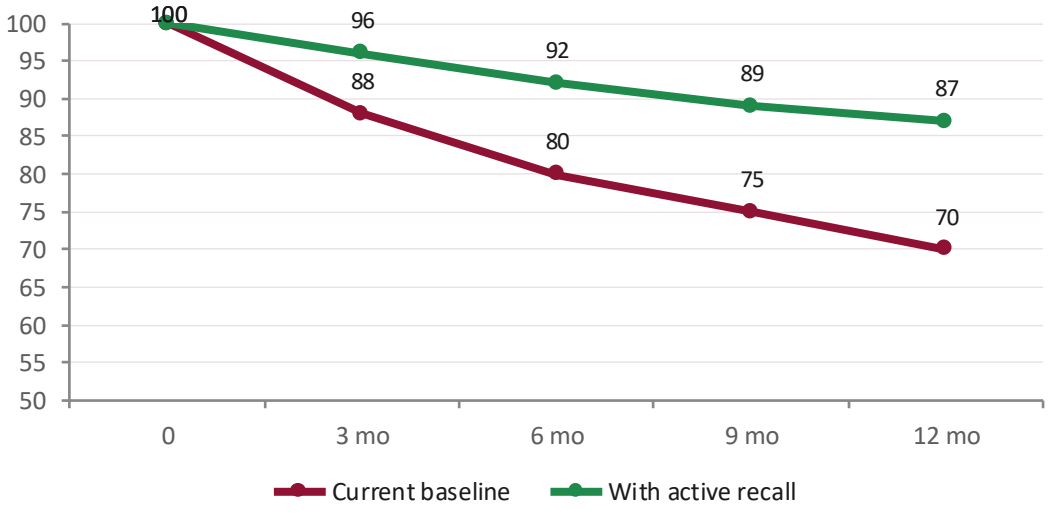
THE PITFALL

30% of PROLANIS patients lost within 12 months, well above the WHO target of <10%. Outreach screening rarely converts into in-clinic visits because there is no recall mechanism.

Recall Touchpoint Timeline

Day 0	**Diagnosis confirmed**	Puskesmas	*In-person + SATUSEHAT enroll*
Day 7	**WhatsApp check-in**	Auto-bot	*Reminds first refill date*
Day 14	**If no refill**	Kader	*Home visit, BP check*
Day 30	**Routine refill**	Puskesmas	*PROLANIS group session*
Day 90	**Adherence review**	Dokter	*MMD eligibility check*

Projected 12-month Retention



Retention gain at 12 months: **+17 pp** (70% → 87%)

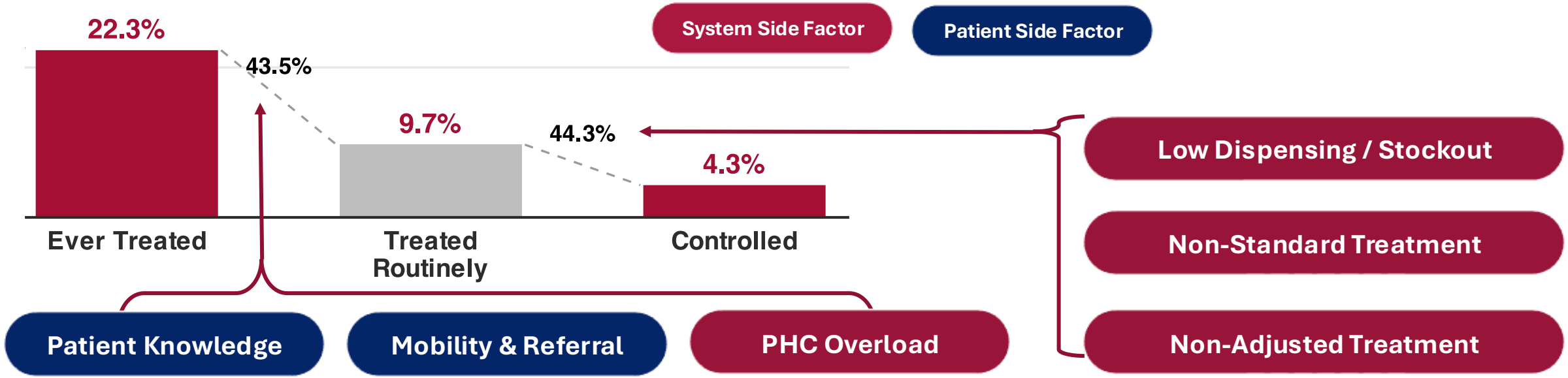
Infrastructure: SATUSEHAT-triggered WhatsApp Business API + kader dashboard on Posbindu app. No new platforms required.

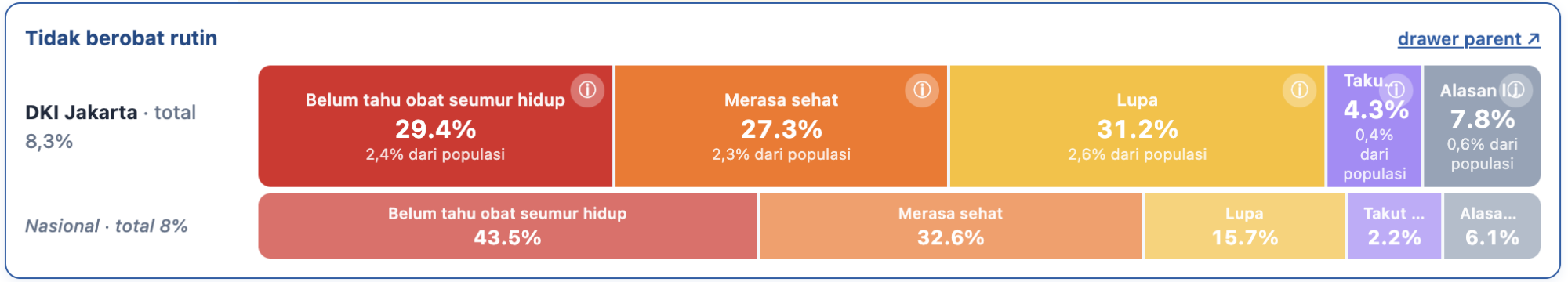
How Can We Improve Controlled?

*How can we boost the care cascade through **novel interventions**?*

1. *Task Shifting Task Sharing (TSTS)*
2. *Multi-Month Dispensing (MMD) and Supply Chain*

Why does a patient who got treatment not get controlled?





Variation exists in **why** patients are **not routinely treated.**
(SKI 2023)

Largest proportion: Patients **do not know** that HT drugs have to be **consumed for a lifetime**. This indicates **poor education by providers**.

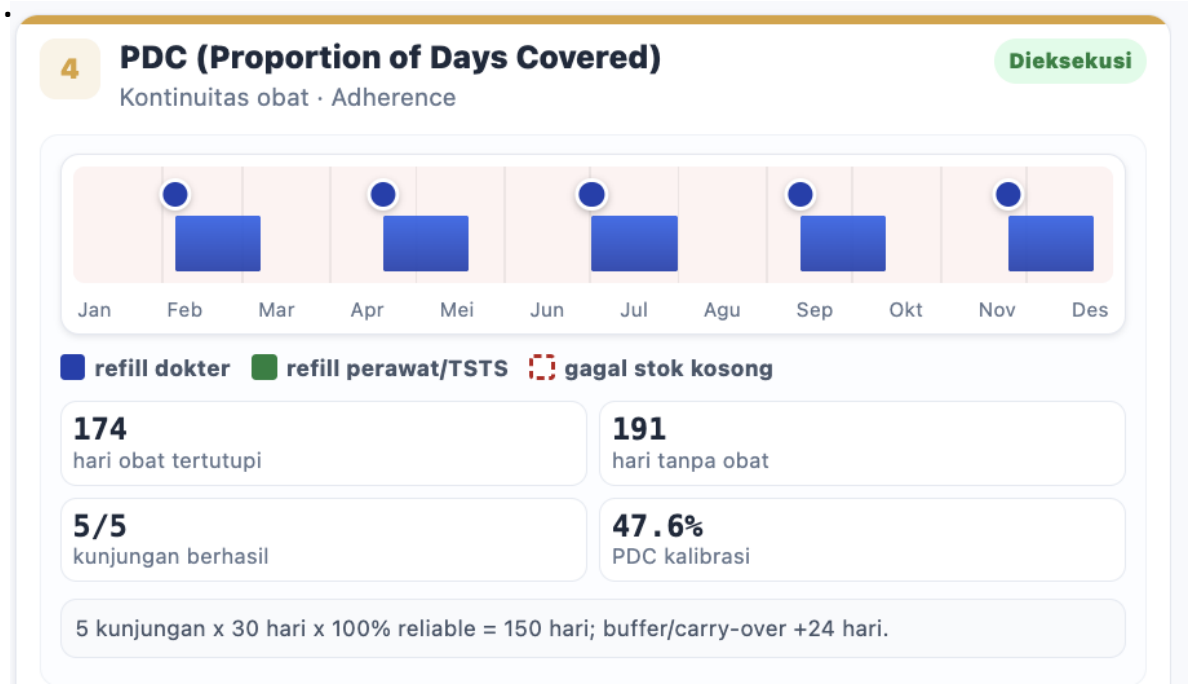
The remaining knew that HT drugs are for a lifetime, but they **felt healthy**, **were forgetful**, or were **afraid of drug side effects**.

Other reasons included traditional medicine consumption, unavailable drugs, etc.

What indicators can a health system control?

1. PROPORTION DAYS COVERED

1.



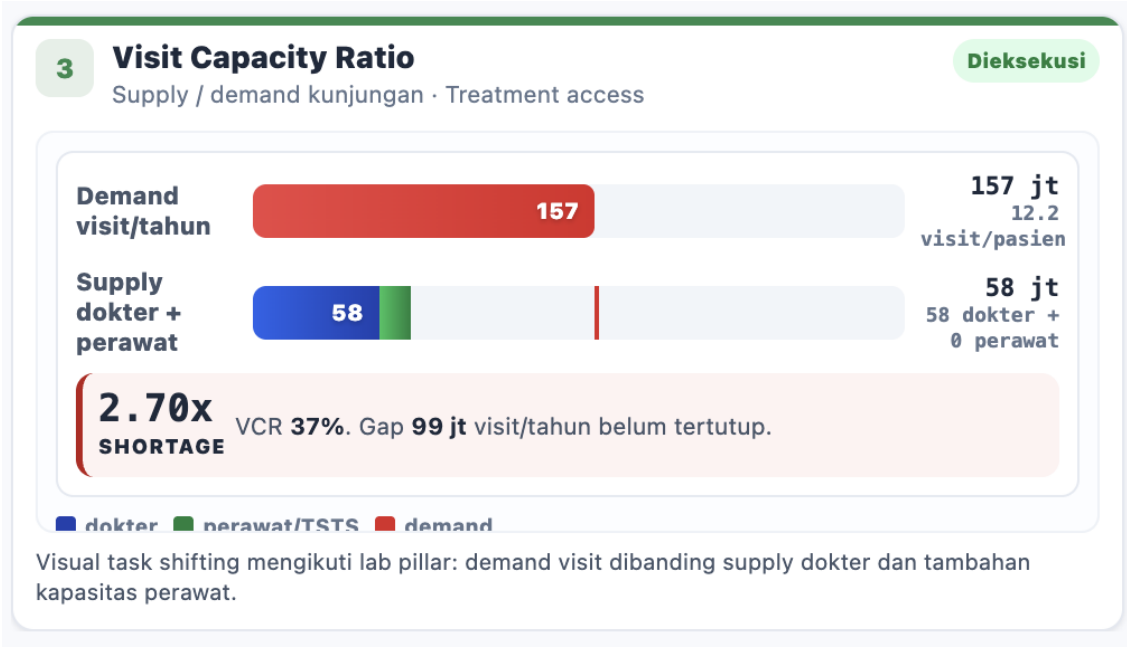
✓ WHAT GOOD LOOKS LIKE

PDC ≥80%: BP/HbA1c control can be achieved; the impact on CVD mortality is significant.

× WHAT BAD LOOKS LIKE

PDC <30%: treatment effect is similar to being untreated; CVD risk remains uncontrolled.

2. VISIT CAPACITY



✓ WHAT GOOD LOOKS LIKE

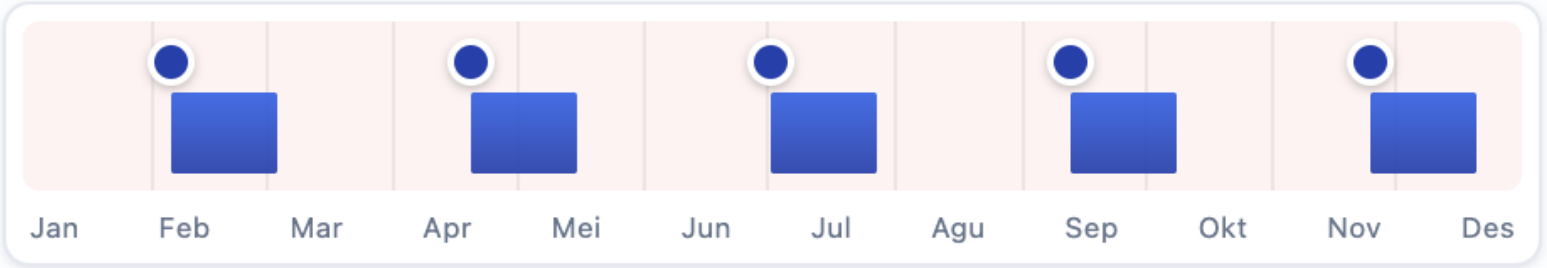
VCR ≥80%: patients receive routine follow-up as needed; blood pressure and glucose control can be achieved.

× WHAT BAD LOOKS LIKE

VCR <50%: most patients do not get follow-up slots; adherence drops and LTFU increases.

What Health System Can Control?

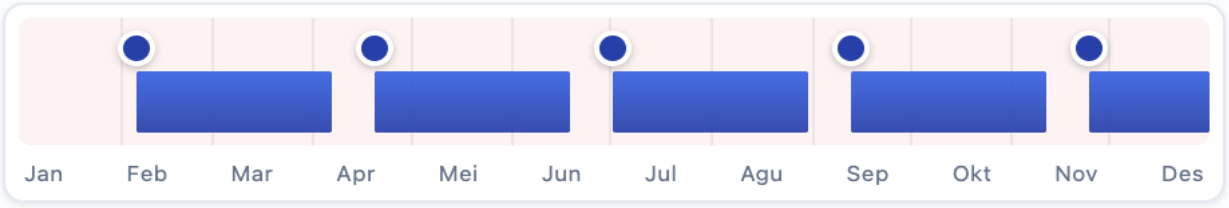
Current Indonesian Situation



Average Visit = 5
Average Dispensing = 17 day

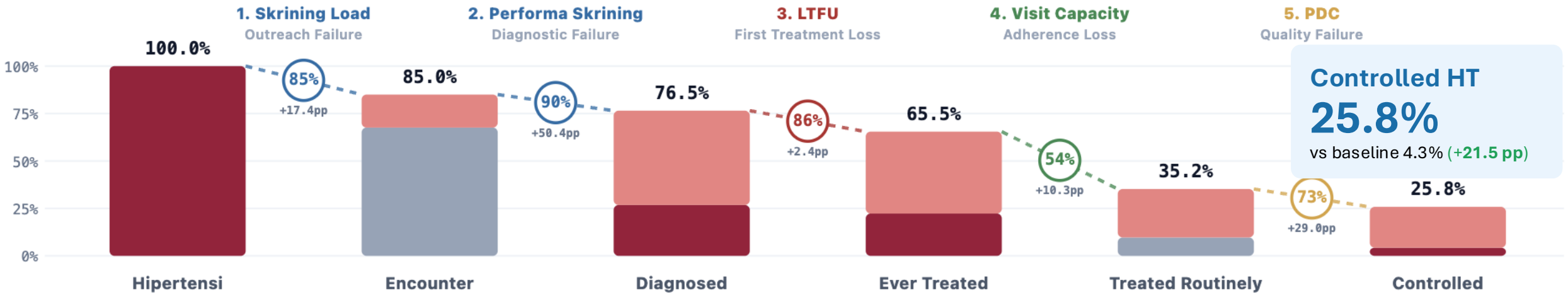
PDC = (5 x 17) /365 = 23%

Intervention 1: Expand the Dispensing (MMD)



Intervention 2: Task Sharing with the Nurse

Model 3a: Pro Multi-Month Dispensing (MMD)



3 **Visit Capacity Ratio** Dieksekusi

Supply / demand kunjungan · Treatment access

Demand visit/tahun	52	52 jt 4.1 visit/pasien
Supply dokter + perawat	58	58 jt 58 dokter + 0 perawat

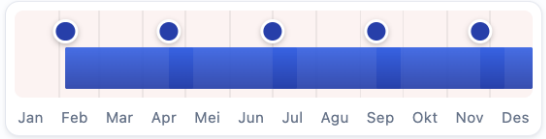
1.11x SURPLUS VCR **111%**. Slack **6 jt** visit/tahun tersedia.

dokter · perawat/TSTS · demand

Visual task shifting mengikuti lab pillar: demand visit dibanding supply dokter dan tambahan kapasitas perawat.

4 **PDC (Proportion of Days Covered)** Dieksekusi

Kontinuitas obat · Adherence



refill dokter · refill perawat/TSTS · gagal stok kosong

347 hari obat tertutupi	18 hari tanpa obat
5/5 kunjungan berhasil	95.0% PDC kalibrasi

Visual PDC menggabungkan durasi dispensing dan stockout untuk membaca hari obat yang tercakup dalam setahun.

Task Shifting

☑ **Task Shifting / Task Sharing** kapasitas dokter + perawat

Rasio GP : Nurse TSTS 1 GP : 0 Nrs

Tiga posisi: 1 GP : 0 Nrs, 1 GP : 1 Nrs, atau 1 GP : 2 Nrs.

MMD + Supply

☑ **Multi-Month Dispensing (MMD)** PDC: hari dispensing + stockout

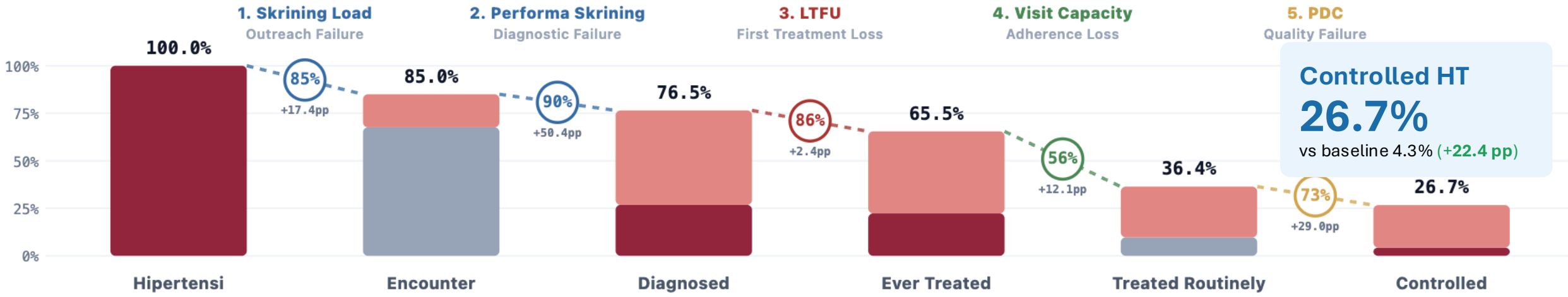
Hari dispensing per visit 90 hari

MMD memperpanjang cakupan obat per kunjungan.

Stockout obat esensial 0%

Supply chain strengthening menurunkan hari tanpa obat.

Model 3b: Pro Task Shifting Task Sharing (TSTS)



3 **Visit Capacity Ratio** Dieksekusi

Supply / demand kunjungan · Treatment access

Demand visit/tahun	152	152 jt 11.8 visit/pasien
Supply dokter + perawat	58 / 116	174 jt 58 dokter + 116 perawat

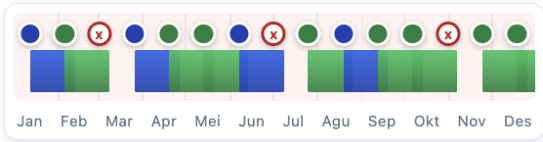
1.15x SURPLUS VCR **115%**. Slack **22 jt** visit/tahun tersedia.

dokter · perawat/TSTS · demand

Visual task shifting mengikuti lab pillar: demand visit dibanding supply dokter dan tambahan kapasitas perawat.

4 **PDC (Proportion of Days Covered)** Dieksekusi

Kontinuitas obat · Adherence



refill dokter · refill perawat/TSTS · gagal stok kosong

347 hari obat tertutupi	**18** hari tanpa obat
12/15 kunjungan berhasil	**95.0%** PDC kalibrasi

Visual PDC menggabungkan durasi dispensing dan stockout untuk membaca hari obat yang tercakup dalam setahun.

Task Shifting | **MMD + Supply**

☑ **Task Shifting / Task Sharing** kapasitas dokter + perawat

Rasio GP : Nurse TSTS 1 GP : 2 Nrs

Tiga posisi: 1 GP : 0 Nrs, 1 GP : 1 Nrs, atau 1 GP : 2 Nrs.

☑ **Multi-Month Dispensing (MMD)** PDC: hari dispensing + stockout

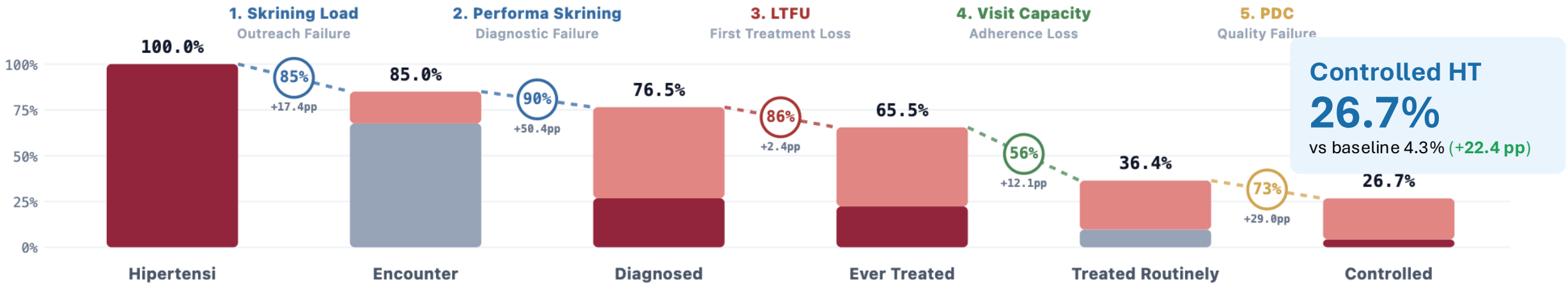
Hari dispensing per visit 30 hari

MMD memperpanjang cakupan obat per kunjungan.

Stockout obat esensial 0%

Supply chain strengthening menurunkan hari tanpa obat.

Model 3c: Hybrid TSTS & MMD



3 **Visit Capacity Ratio** Dieksekusi

Supply / demand kunjungan · Treatment access

Demand visit/tahun	79	79 jt 6.1 visit/pasien
Supply dokter + perawat	58 | 58	116 jt 58 dokter + 58 perawat

1.48x SURPLUS VCR **148%**. Slack **38 jt** visit/tahun tersedia.

dokter · perawat/TSTS · demand

Visual task shifting mengikuti lab pillar: demand visit dibanding supply dokter dan tambahan kapasitas perawat.

4 **PDC (Proportion of Days Covered)** Dieksekusi

Kontinuitas obat · Adherence

refill dokter · refill perawat/TSTS · gagal stok kosong

347 hari obat tertutupi	18 hari tanpa obat
10/10 kunjungan berhasil	95.0% PDC kalibrasi

Visual PDC menggabungkan durasi dispensing dan stockout untuk membaca hari obat yang tercakup dalam setahun.

Task Shifting

☑ **Task Shifting / Task Sharing** kapasitas dokter + perawat

Rasio GP : Nurse TSTS 1 GP : 1 Nrs

Tiga posisi: 1 GP : 0 Nrs, 1 GP : 1 Nrs, atau 1 GP : 2 Nrs.

MMD + Supply

☑ **Multi-Month Dispensing (MMD)** PDC: hari dispensing + stockout

Hari dispensing per visit 60 hari

MMD memperpanjang cakupan obat per kunjungan.

Stockout obat esensial 0%

Supply chain strengthening menurunkan hari tanpa obat.

The Complete Prescription

Intervention

1. Better Screening
2. Cadre Outreach
3. Task Shifting / Task Sharing
4. Supply Chain
   + Multi-Month Dispensing

Process

1. Encounter rate/load
2. Screening Performance
3. Loss-to-follow-up
4. Visit Capacity
5. Proportion of Days Covered

Output

1. 70% Diagnosed
2. 70% Treated
3. 70% Controlled
4. High Quality NCD Care

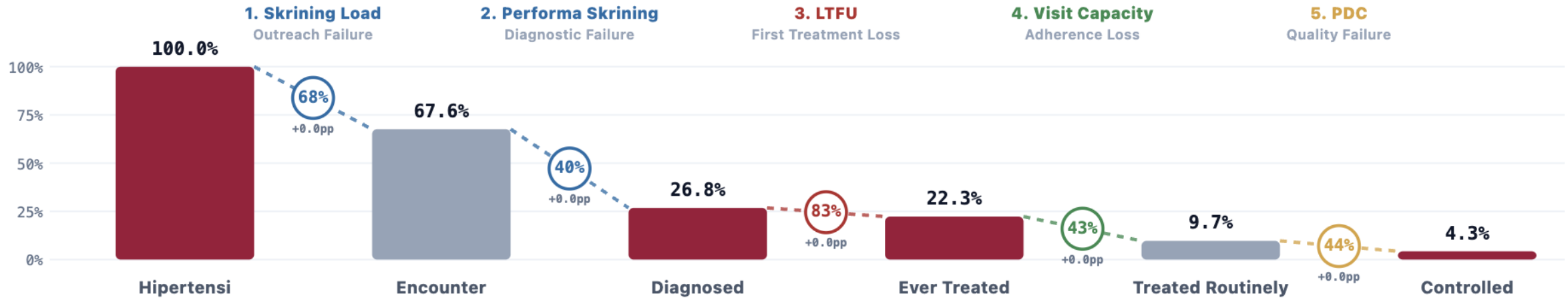
Outcome

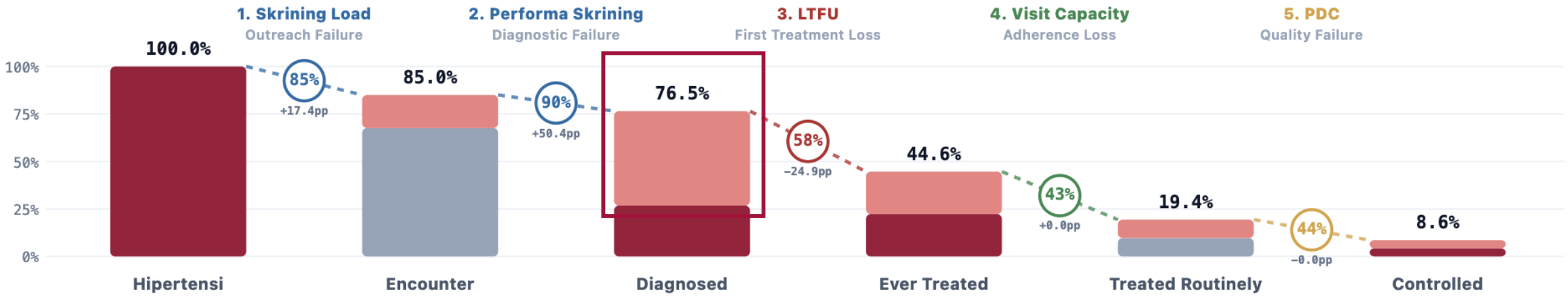
1. Reduction of CVD Burden
2. Reduction of Premature Death

Key Message:

1. *Modelling able to estimate the bottleneck and the effect of interventions.*
2. *Comprehensive interventions will improve process indicators, leading to better cascade control and reductions in disease and mortality*

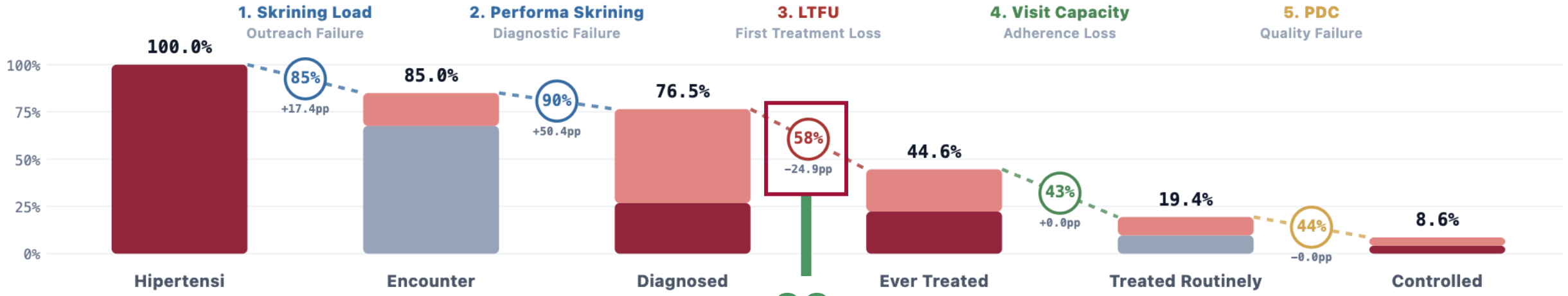
Scenario 1: **CKG Effective Screening**





Scenario 2: **CKG + Outreach at 50%**

Previous cascade performance with CKG 1 million/day and 90% screening performance (**Model 1**)



Model 2 with **outreach coverage for follow-up**

50% population coverage & retention through Posbindu

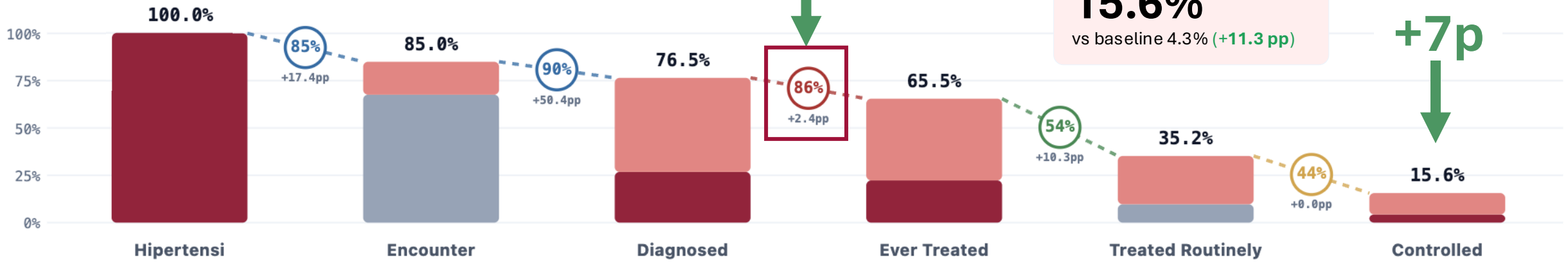
+28p

Controlled HT

15.6%

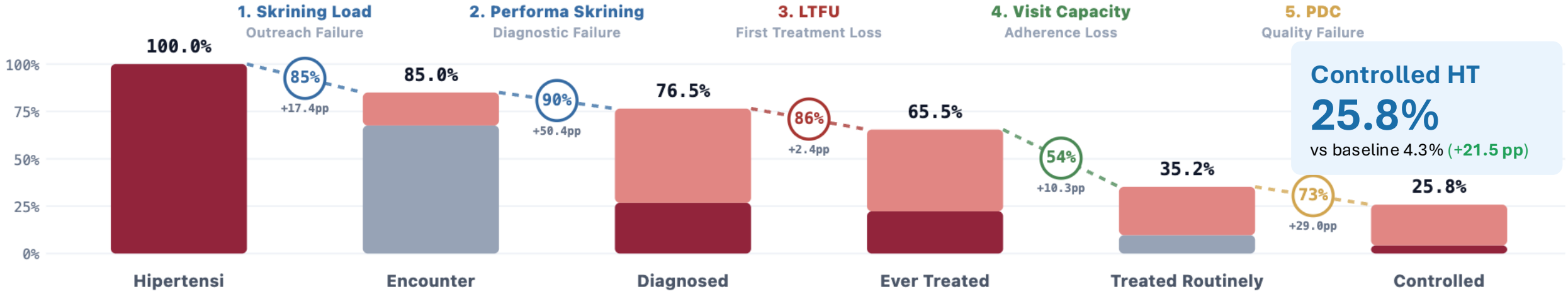
vs baseline 4.3% (+11.3 pp)

+7p

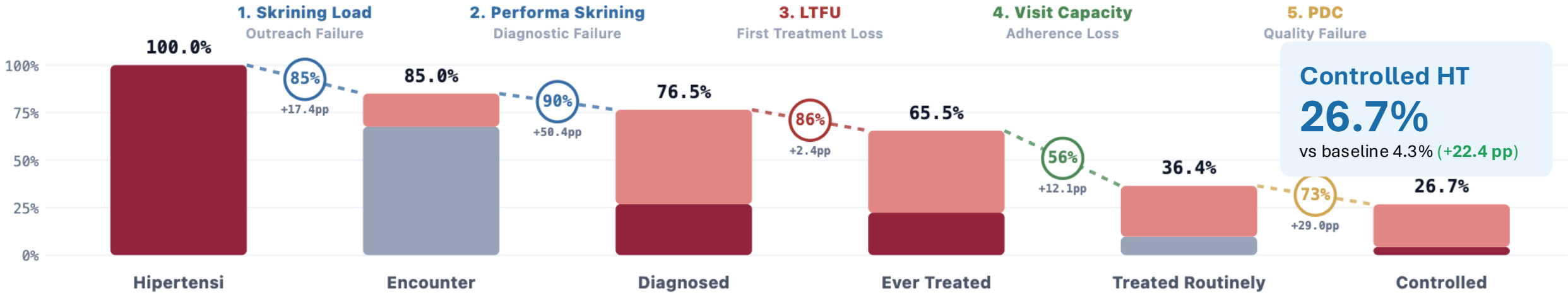


Scenario 3: Task Shifting Task Sharing (TSTS) & MMD

Scenario 3a: Pro Multi-Month Dispensing (MMD)

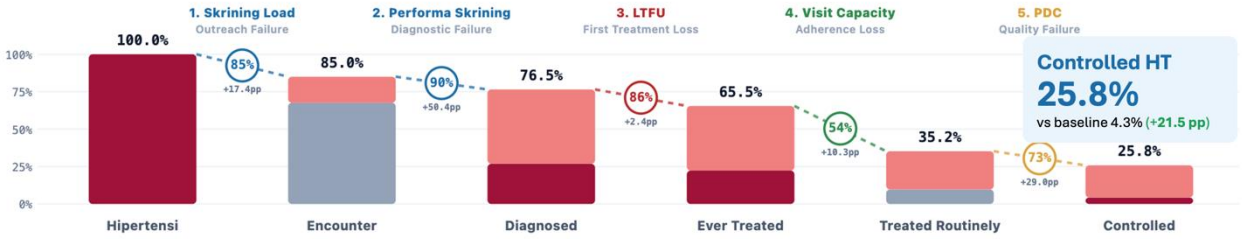


Scenario 3b: Pro Task Shifting Task Sharing (TSTS)

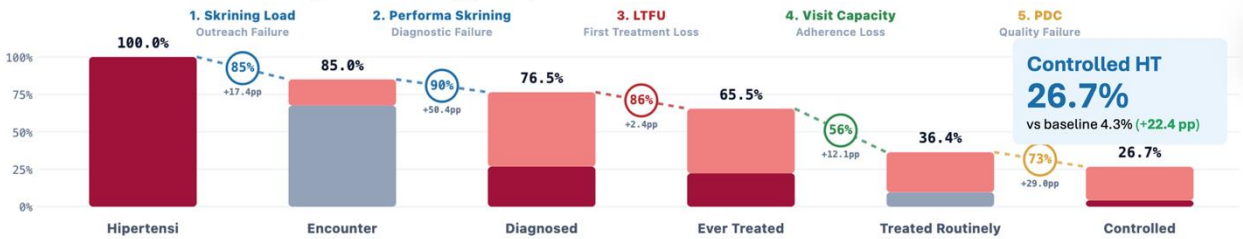


Scenario 3: Task Shifting Task Sharing (TSTS) & MMD

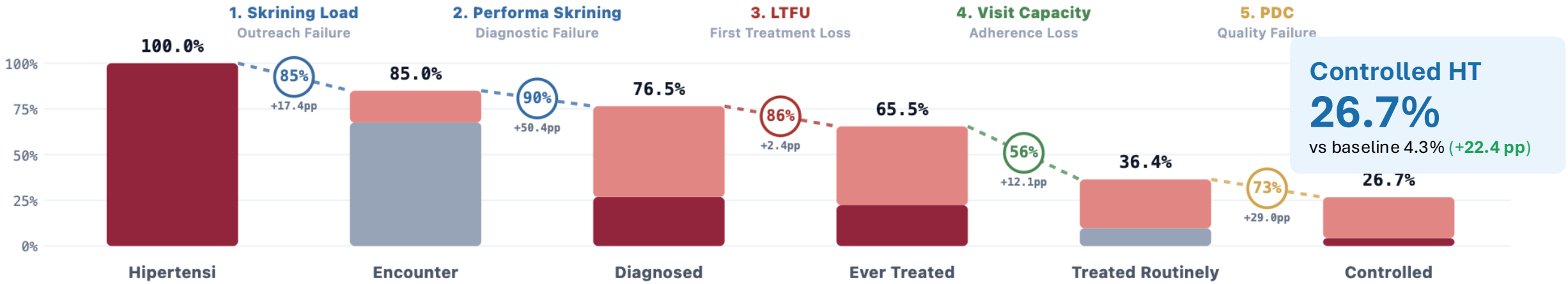
Scenario 3a: Pro Multi-Month Dispensing (MMD)



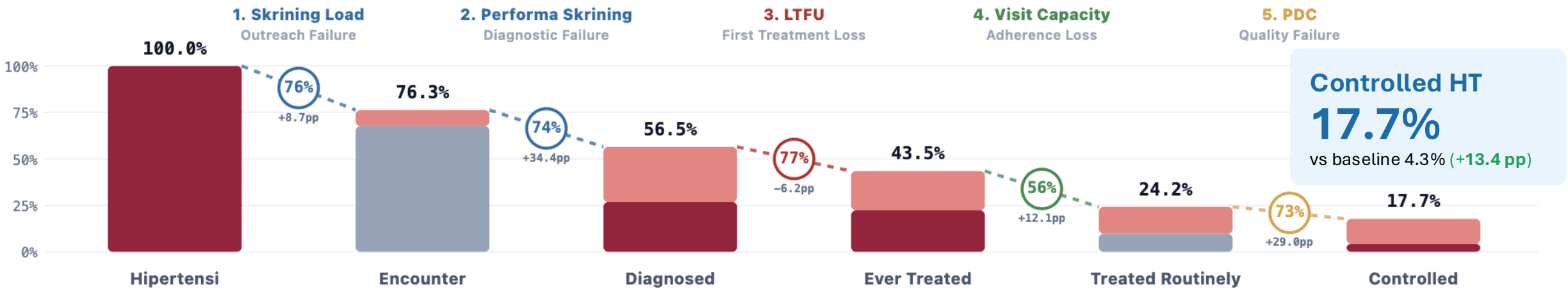
Scenario 3b: Pro Task Shifting Task Sharing (TSTS)



Scenario 3c: Hybrid TSTS & MMD



Scenario 4: **50% Combined Interventions**



Controlled HT
17.7%
vs baseline 4.3% (+13.4 pp)

CKG Effective Screening | **Outreach 50%** | **Task Shifting** | **MMD + Supply**

CKG Effective Screening load + performa skrining

Load skrining harian 0.75 jt/hari

0-1 juta orang per hari kerja; kondisi sekarang sekitar 0.50 jt/hari.

Performa/sensitivitas skrining 74.0%

Kondisi sekarang: positivity CKG 19% dibanding prevalensi HT 33% = 19/33.

Outreach via Posbindu coverage populasi + retensi

Coverage outreach populasi 25%

Maksimum 50% populasi pasien dicapai outreach/Posbindu; 50% coverage diperlakukan sebagai efek outreach penuh.

Task Shifting / Task Sharing kapasitas dokter + perawat

Rasio GP : Nurse TSTS 1 GP : 1 Nrs

Tiga posisi: 1 GP : 0 Nrs, 1 GP : 1 Nrs, atau 1 GP : 2 Nrs.

Multi-Month Dispensing (MMD) PDC: hari dispensing + stockout

Hari dispensing per visit 54 hari

MMD memperpanjang cakupan obat per kunjungan.

Stockout obat esensial 13%

Supply chain strengthening menurunkan hari tanpa obat.

Key Notes

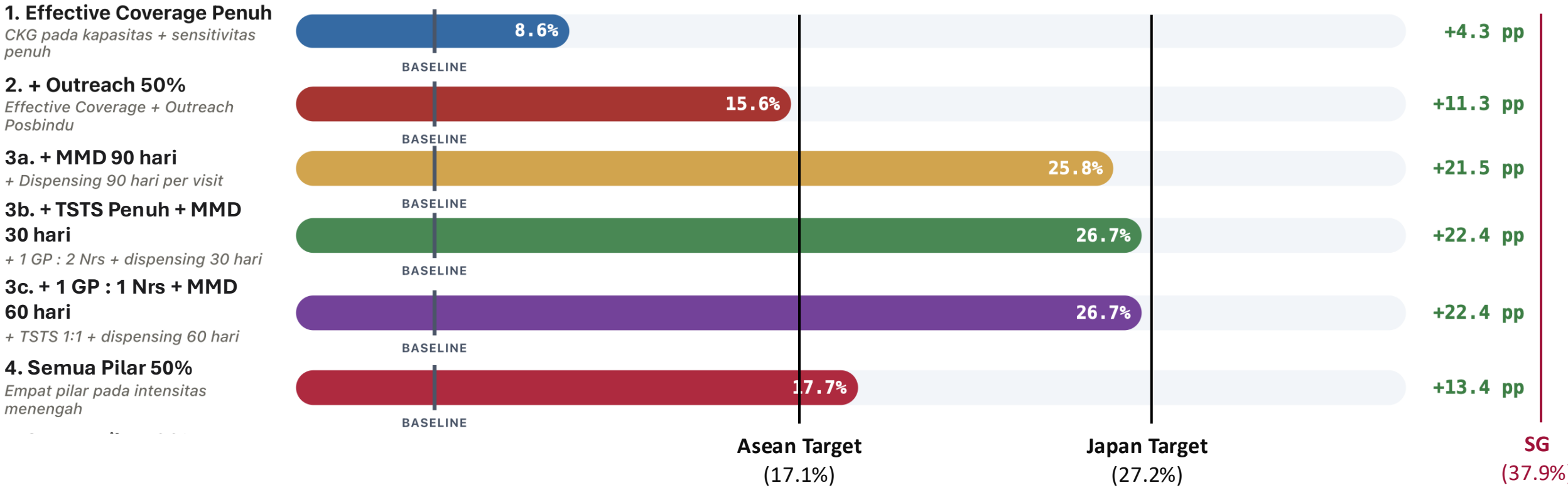
Even at 50% of the target, the combination of all four pillars provides a proportional gain far **greater than any single intervention at maximum intensity**.

Summary of Scenarios and Cascade Performances

POLICY IMPLICATION

Sustained cascade improvement requires **all intervention pillars** instead of singular interventions.

% populasi hipertensi terkendali per skenario · baseline 4.3% · panjang bar = level kontrol, marker abu-abu = baseline.



Single Interventions' Cascade Performances

POLICY IMPLICATION

Sustained cascade improvement requires **all intervention pillars** instead of singular interventions.

% populasi hipertensi terkendali per skenario · baseline 4.3% · panjang bar = level kontrol, marker abu-abu = baseline.

Scalability: How scalable are they for All Three Diseases and Down to Every Province and District

The same modelling framework applies across diseases, geographies, and levels of government

Hypertension

#1 driver of CVD deaths

Diabetes

Rising fastest among under-50s

▼ Same model, applied at three levels of Indonesia's health system

National Level

Aggregate projections for MoH policy planning, JKN benefit package design, and national NCD targets

Provincial Level

Compare performance across 34 provinces — identify which need priority investment and what type

District Level

Granular data for Dinas Kesehatan to plan Puskesmas staffing, drug procurement, and outreach

Questions?

The Impact of interventions

APPENDIX

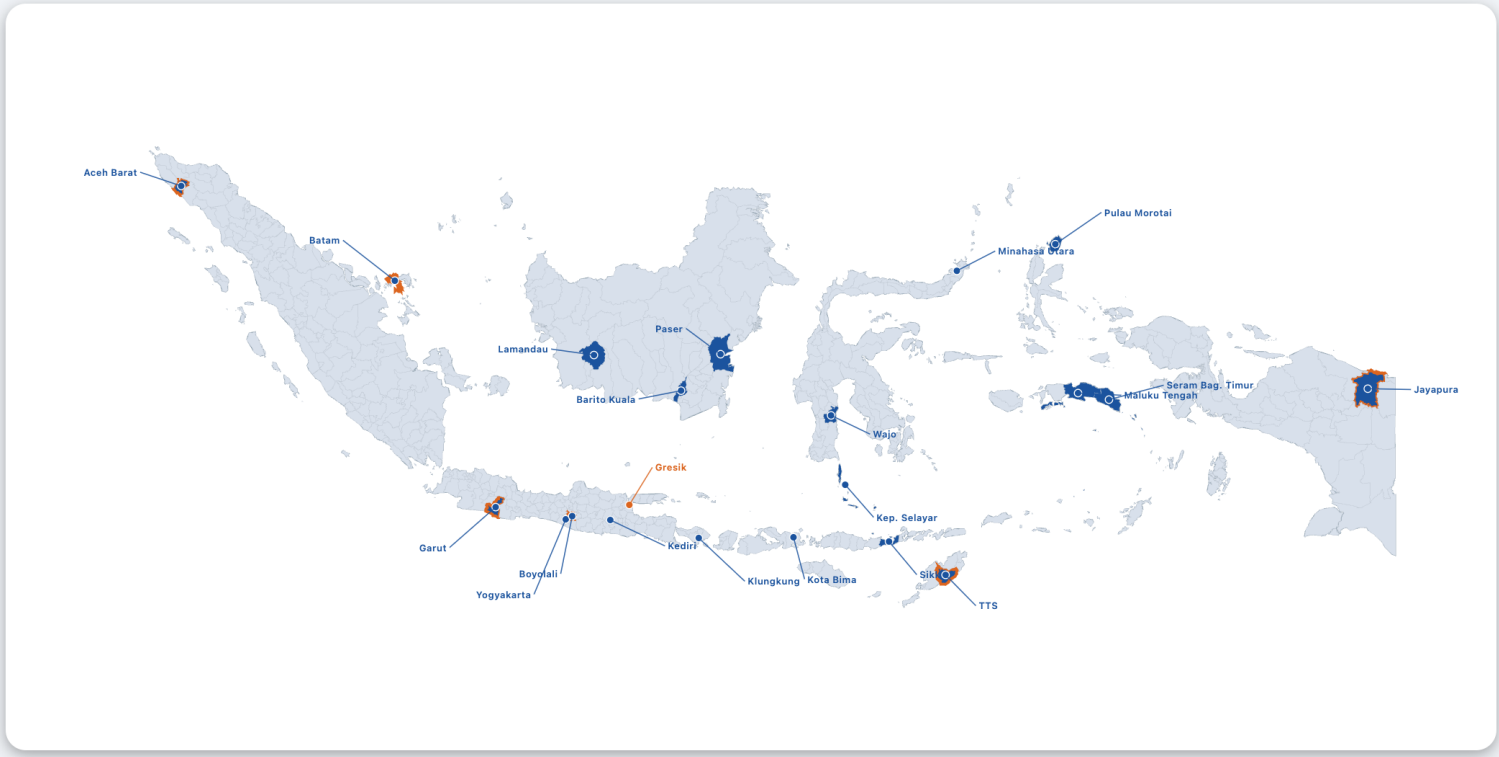
The Impact of interventions

Mixed-methods to explore the bottleneck

1. Quantitative Analysis

Riskesdas 2013 | **Riskesdas 2018** | **SKI 2023** | **BPJS Claims**

Primary Costing on 20 District; 60 Health Facility; 589 Patients



2. Qualitative Analysis

Participant Characteristics	(n)
Methods	
Interviews	**67**
FGD	**136**
Sex	
Male	83
Female	120
Role	
District Health Office	7
Provincial Health Office	7
Head/Management of Puskesmas	15
GP in Private Primary Care	14
GP in Puskesmas	15
Specialist Doctor	9
Diagnosed Patients (FGD)	67
Undiagnosed Patients (FGD)	69
Location	
Aceh Barat	30
Batam	38
Boyolali	31
Garut	25
Jayapura	2
Kota Yogyakarta	14
Malang	34
Timor Tengah Selatan	29

1st and 2nd AMHASS Dashboard : The Story and National Assessment

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① CERITA CASCADE

Cerita Kaskade — Pengantar Naratif

Mulai di sini. Cerita visual lima pilar AMHASS dan kenapa cascade PTM penting: dari orang belum tahu statusnya, sampai pasien controlled. Scroll narrative dengan grafik animasi, ID/EN.

Pertanyaan: "Saya baru kenal AMHASS, mau tahu konteksnya dulu." — semua audiens, sebagai entry point.

Mulai dari sini→ /about/

② CASCADE ASSESSMENT

Cascade Assessment — Potret Kondisi PTM Sekarang

Indikator hipertensi, diabetes, dan CVD di tingkat nasional, provinsi, dan 514 kabupaten/kota. Tujuh bab tematik: akses, diagnosis, pengobatan, kontrol, ekuitas, dan beban penyakit. Pilih nasional atau subnasional langsung.

Pertanyaan: "Di mana posisi daerah saya dibanding rata-rata?" — pejabat dinas, peneliti, advokasi.

Buka Asesmen→ /assessment/

3rd and 4th AMHASS Dashboard : Indicators and Interventions

③ INDIKATOR STRATEGIS

Indikator Strategis

Empat indikator strategis yang menentukan apakah cascade **PTM (Penyakit Tidak Menular)** berfungsi: **Effective Screening Coverage**, **Visit Capacity Ratio**, **PDC (Proportion of Days Covered)**, **LTFU (Lost to Follow-Up)**. Tiap indikator dengan baseline nasional + visualisasi simbolik dampak intervensi pilar yang menargetkannya. Combo argument 4-pilar.

> **Pertanyaan:** "Saya mau tahu indikator strategis mana yang harus diintervensi dan apa dampaknya." — pejabat baru, jurnalis, koordinator program.

Lihat Indikator → `/indikator/`

④ PEMILIHAN INTERVENSI

Pemilihan Intervensi

Landing dengan **spektrum semua intervensi** per tahap cascade PTM (~30+ intervensi umum di literatur), dan **4 pilar yang AMHASS pilih** untuk dimodelkan: CKG (Cek Kesehatan Gratis), Task Shifting/Sharing, Supply Chain + Multi-Month Dispensing, Outreach. Klik pilar di landing untuk masuk ke detail parameter granular per pilar — slider, formula, dampak cascade live.

> **Pertanyaan:** "Saya mau lihat spektrum intervensi yang ada dan apa yang kita pilih." — penyusun kebijakan, peneliti, fasilitator workshop.

Lihat Spektrum & Pilar→ `/intervensi/`

5th and 6th AMHASS Dashboard : Scoring and Microsimulation

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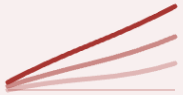
⑤ DEMO SKORING

Demo Skoring Risiko Pasien (CVD & DM)

Demo interaktif: input variabel pasien (usia, BP, BMI, merokok, lingkar perut, aktivitas fisik) sekali, dapat **2 skor** sekaligus — risiko diabetes (Indonesia Card A) & CVD 10-tahun (Globorisk-office IDN 2020). Plus alur tatalaksana per risk level & lokasi awal: Posbindu/Puskesmas/RS — provider, program, obat dengan dosis, tes lanjutan.

> **Pertanyaan:** "Saya ingin lihat bagaimana skor digunakan di klinik / Posbindu." — perawat Posbindu, dokter umum, fasilitator pelatihan, mahasiswa kedokteran.

Coba Demo→ `/risk-scoring/`



⑥ MODELING PENUH

Dashboard Modeling Penuh

Microsimulasi 4-pilar untuk HT & DM dengan keluaran CVD, biaya, dan DALY 10 tahun ke depan. Tab provinsi (38), kab/kota (510), kalibrasi M3.9 + per-quintile + per-provinsi ρ + workforce, PSA + CEAC.

> **Pertanyaan:** "Saya butuh ICER per skenario, perbandingan provinsi, sensitivitas." — analis kebijakan, peneliti HE, BPJS/Kemenkes teknis.

Buka Modeling → `/modeling/`

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