



ISN

INTERNATIONAL SOCIETY
OF NEPHROLOGY

ACADEMY

KIDNEY HEALTH EDUCATION FOR GLOBAL IMPACT



Rethinking CKD Screening: Who, When, and How to Screen for CKD? Lessons from Taiwan

Dr. I-Wen Wu, Taipei Medical University Hospital



Taiwan carries one of the world's heaviest burdens

~10 %

of the global population
is affected by chronic
kidney disease

3,824 pmp

highest prevalence of
treated kidney failure in
the world, 2023 —
diabetes the main driver

11.9 → 12.4 %

projected CKD prevalence in
Taiwan without
improvements in care
standards

US\$1.48 bn

outpatient dialysis
budget in 2025, growing
at a stable 3% per year

CKD drives enormous cardiovascular morbidity, mortality and health-care expenditure worldwide — and the burden in Taiwan is particularly heavy.

In response, Taiwan has fundamentally reoriented its kidney care strategy from a reactive, dialysis-centric approach towards a **proactive, prevention-first strategy**.

Four strategies to combat the disease burden

1

Population-level, life-course screening

Early diagnosis of CKD and
nephrology referral

2

Multidisciplinary collaboration, high- risk patients

Case-finding and guideline-
directed medical therapy

3

Data-driven surveillance

Registries, annual reporting
and real-time monitoring

4

Digital and AI interventions

Precision prevention inside
the NHI system

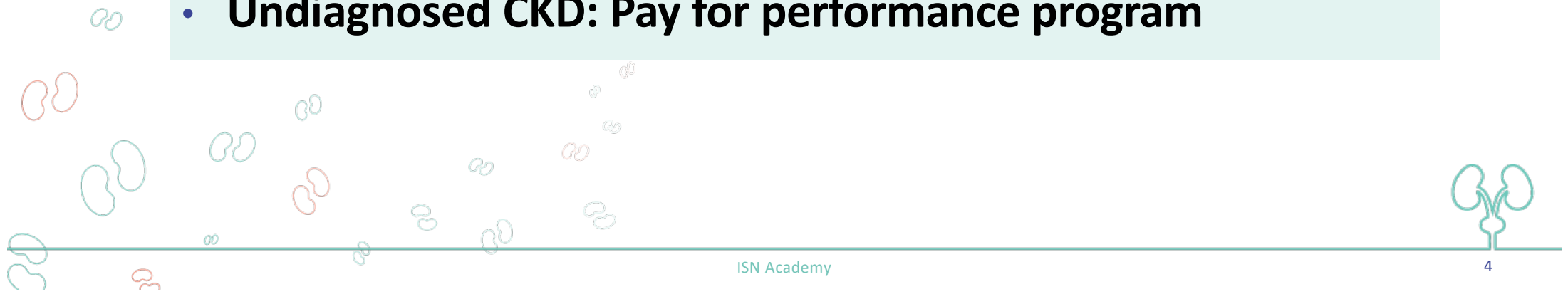
The organising principle

Screening is never an end: patients identified are referred by standardized criteria into structured care programmes, and reimbursement follows the attainment of clinical outcomes rather than the volume of care.

Wu IW et al. Addressing the high burden of kidney disease: lessons from Taiwan. *Nat Rev Nephrol* 2026.

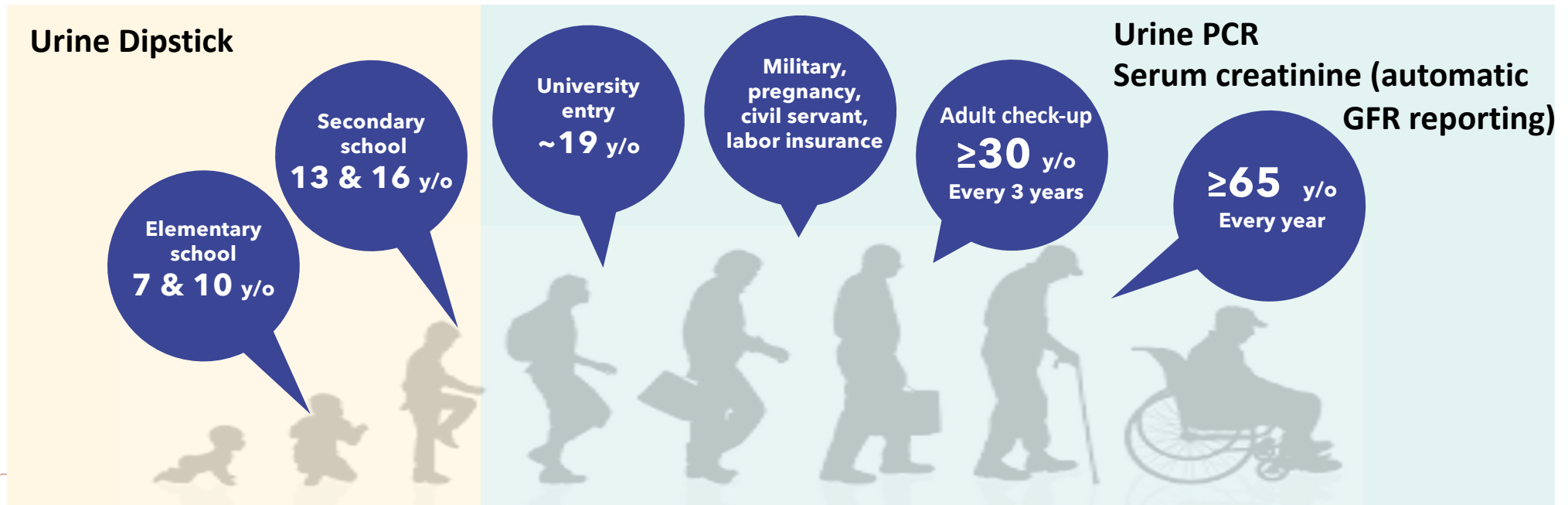
CKD screening strategies in Taiwan

- **Asymptomatic :Population-level, life-course screening**
- **High-Risk patients: Primary care settings**
- **Undiagnosed CKD: Pay for performance program**



Taiwan screens by life stage, not by risk factor

Free CKD screening across the life course, high-risk patients and families of CKD demand extra testing



Integrated into routine contacts: school entry (elementary, secondary and university), military physicals, pregnancy monitoring visits, and adult health checkups every 3 years from age 30 and annually from age 65

Family Physician Network Program to address High-Risk patients

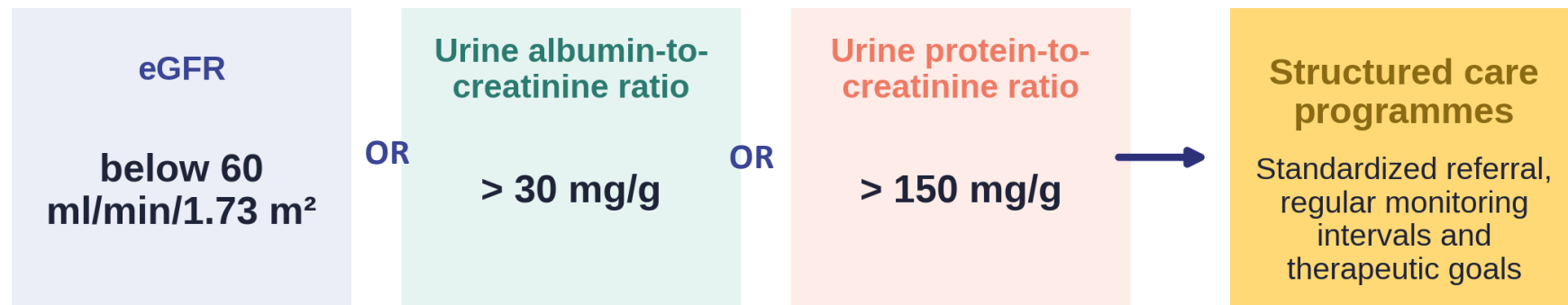
“Healthy Taiwan 888”, targets for 2030

Individuals with the 'three highs' — hypertension, hyperglycaemia and hyperlipidaemia — by 2030



Why this matters for kidney care: the "three highs" are the upstream risk factors for CKD. A forthcoming **family physician network program** addresses them with holistic and community approaches, extending prevention beyond the nephrology clinic.

Standardized referral into structured care



any one criterion met

Patients identified with CKD are systematically referred according to standardized criteria, with regular monitoring intervals and therapeutic goals defined by the program they enter.

We need General Practitioner to join us in this battle

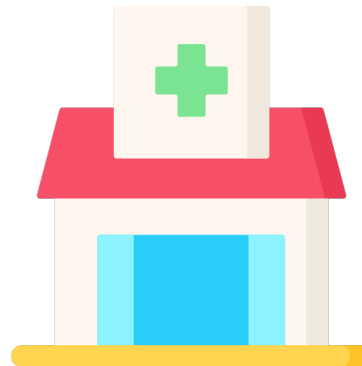
**274
institutes**



 Kidney Health Promotion Institute

Started in 2003: mainly located in medical centers, regional hospitals, and dialysis clinics

**70
clinics**



 Early CKD Health Promotion Institute

Started in 2021, mainly are clinics with different specialties (Need **guidance, platform and incentive** to motivate them)

Launched 「**Kidney Health Promotion Institute**」 in 2003

Breakthrough in 2021:

GP can join 「Early CKD Health Promotion Institute」

- CKD stage 1- 3A patients
- Verbal or written standardized education every 6 months
- Pay by practice

Roles of General Practitioner (GP) in CKD screening

- 1 Highlight the high portion of CKD in clinic regular visit patients**
 - It should be the physician's responsibility to identify the CKD patients
 - Raising the awareness of the high-risk population for CKD in daily practices
- 2 Show them the concept that “early diagnosis of CKD is equal to early treatment of CKD”**
 - Supply the physician with strong evidences and teaching instruments
 - Rigorous accreditation to certify the Early CKD Health Promotion Institute
- 3 Reimbursement is linked to the attainment of predefined clinical outcomes rather than the volume of care**
 - Rewarding the sustainability of teamwork

CKD screening in the Healthcare Systems

Four Initiatives to cover pre-ESRD, early CKD, DKD & high-risk groups

Pre-ESRD patients



2006

Pre-ESRD
pay-for-performance
program

Early CKD patients



2011

Early CKD
pay-for-performance
program

DKD patients



2022

Integrated CKD-DM
pay for performance
program

High-risk patients



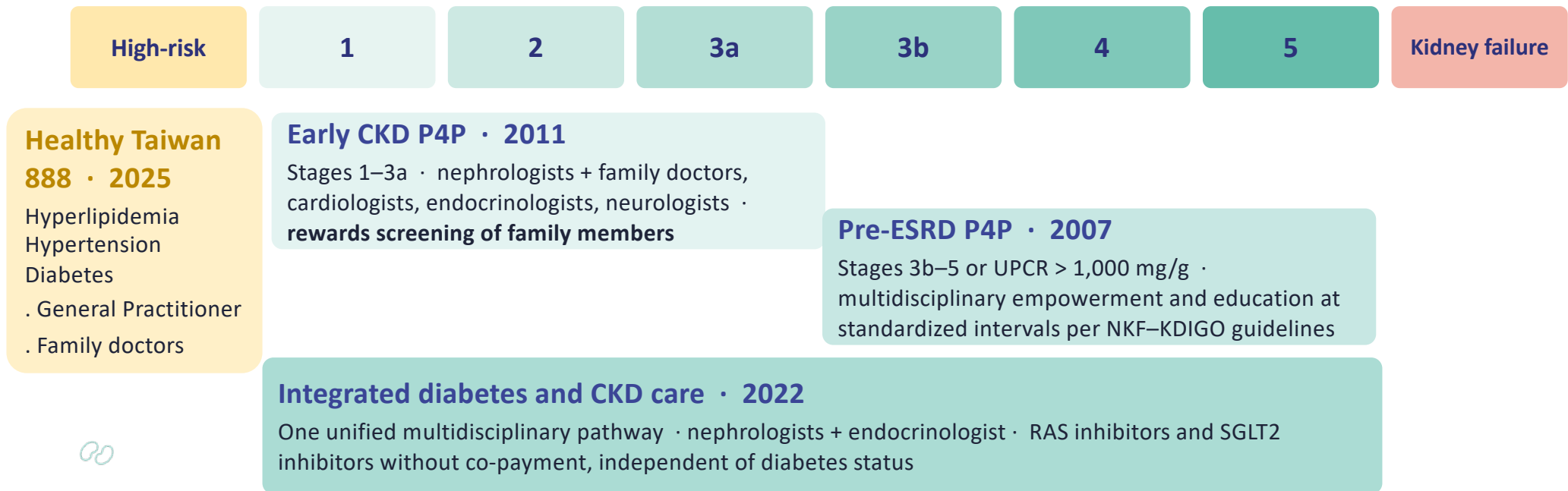
2025

Healthy Taiwan 888
program

Moving from **pre-ESRD** to **Early CKD** to **high-risk** population

Policies in alignment with KDIGO/KDOQI guideline

A staged, integrated clinical care pathway



Reimbursement is linked to attainment of predefined clinical outcomes, not volume of care

Extra rewards: completed annual follow-up · improvement in CKD stage or proteinuria · planned vascular access · pre-emptive transplantation · AKI care added in 2021

Lin, M. Y. et al. *Kidney Med.* 2022

Policy commitment and a universal framework

1

A single-payer NHI covering nearly the whole population since 1995

Universal coverage is inseparable from Taiwan's kidney care achievements.

2

Nationwide policy without the barrier of patient copayments

Policy can be implemented across the whole population at once.

3

Clinical quality standards can be mandated — and financially incentivized

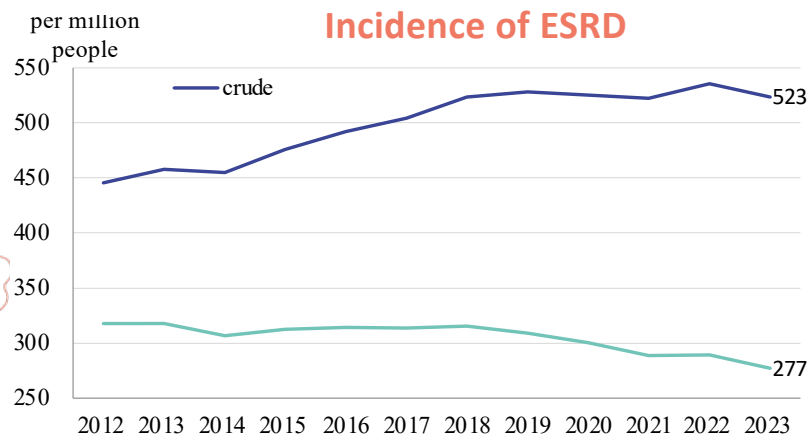
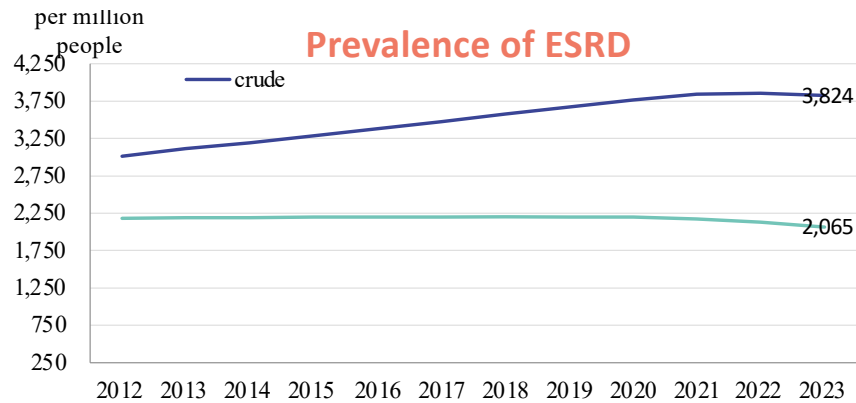
The payer is also the lever for quality.

4

Multi-stakeholder collaborative leadership

Health Promotion Administration and NHI Administration (Ministry of Health and Welfare), the Taiwan Society of Nephrology and health-care systems — ensuring standardized guidelines and evidence-based policy.

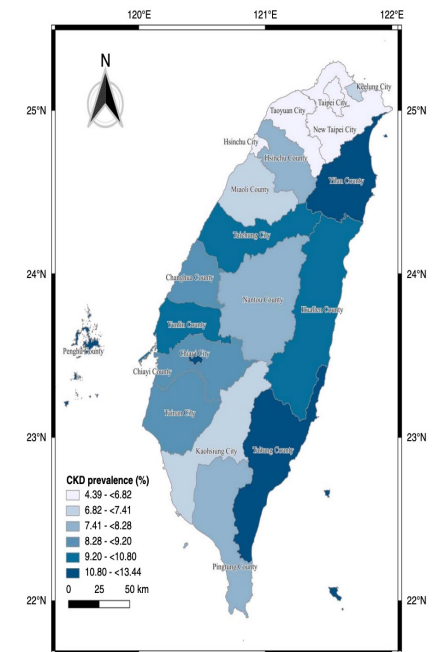
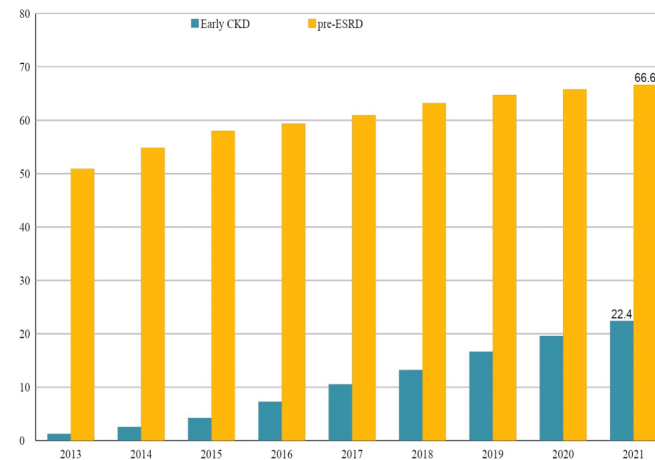
Collective efforts to reduce ESKD burden in spite of regional differences in the prevalence of CKD



2024 Annual Report Kidney Disease in Taiwan; Ang MD, et al. Clin J Am Soc Nephrol. 2026

Age-standardized prevalence of CKD

Number of incident ESRD patients with P4P before entering dialysis



Take-home messages

- 1 Screen by life stage, not by risk factor**
Free kidney testing sits inside contacts people already attend — school, university, military, pregnancy, adult check-ups from age 30.
- 2 Screening only counts if it ends in a pathway**
Every positive result is routed by standardized criteria into a structured programme with defined intervals and therapeutic targets.
- 3 Pay for outcomes, not for volume**
Reimbursement follows attained clinical outcomes — with RAS inhibitors and SGLT2 inhibitors free of co-payment, independent of diabetes status.
- 4 Multidisciplinary collaboration is the key of success for effective CKD screening**
Nephrologists cannot screen a nation: opening the Early CKD program to general practitioners and collaborate with endocrinologist in DKD program make population scale possible.

Lessons from Taiwan: test where people already are → refer by rule → treat to target → pay for the result