PERAWATAN KLIEN GAGAL GINJAL KRONIS DI KELUARGA/KOMUNITAS

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SINTA ID : 55184

Nursing | Family and Community Health Nursing | Gerontic Nursing | Adolescent Health | Maternal and Child Health Care

2.097	1.202	0	0
SINTA Score Overall	SINTA Score 3Yr	Affil Score	Affil Score 3Yr

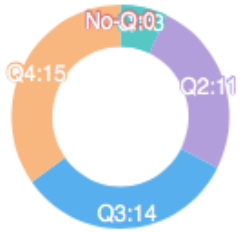
Articles | Researches | Community Services | IPRs | Books | Metrics

Metrics Score

			$V3\ Overall_{Sinta}$		$V3\ 3Yr_{Sinta}$			$V3\ Overall_{Affil}$		$V3\ 3Yr_{Affil}$	
Code	Name	Weight	Value	Total	Value	Total	Weight	Value	Total	Value	Total
A1	SCOPUS ARTICLE (SINGLE AUTHOR)	40	2	80	2	80	0	2	0	2	0
A2	SCOPUS NON ARTICLE (SINGLE AUTHOR)	30	0	0	0	0	0	0	0	0	0
A3	SCOPUS ARTICLE Q1 (FIRST AUTHOR)	24	2	48	2	48	0	2	0	2	0
A4	SCOPUS ARTICLE Q2 (FIRST AUTHOR)	22	5	110	3	66	0	5	0	3	0
A5	SCOPUS ARTICLE Q3 (FIRST AUTHOR)	20	9	180	4	80	0	9	0	4	0

Summary

Article Quartile



Research Output

	Scopus	GScholar	WOS
Article	43	388	24
Citation	156	1078	60
Cited Document	25	97	16
H-Index	8	17	5
i10-Index	4	31	1
G-Index	2	26	1

Konten

- Kerentanan klien gagal ginjal kronis di keluarga dan komunitas
- Perawatan klien gagal ginjal kronis di keluarga dan komunitas
- Dampak gagal ginjal kronis di keluarga dan komunitas
- Perawatan berkelanjutan bagi klien gagal ginjal kronis di keluarga dan komunitas

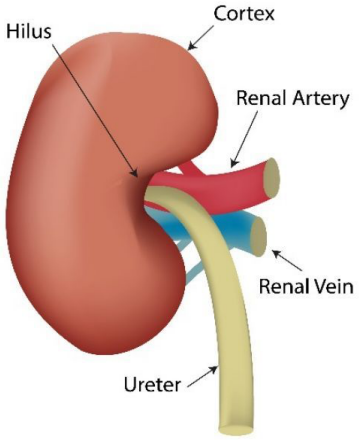
Introduction

Prolog

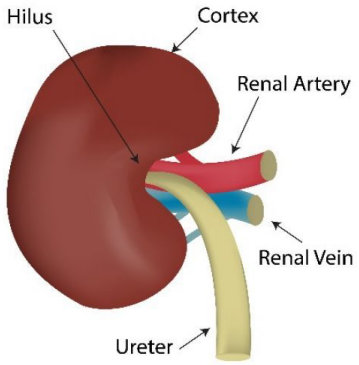
Global Burden of Disease tahun 2010

Kidney Disease

Normal Kidney



Diseased Kidney



Prevalensi di Indonesia laki-laki (0,3%) & perempuan (0,2%)

Stadium	LFG (ml/min/1,73 m²)	Terminologi
G1	≥ 90	Normal atau meningkat
G2	60 – 89	Ringan
G3a	45 – 59	Ringan - sedang
G3b	30 – 44	Sedang – berat
G4	15 – 29	Berat
G5	< 15	Terminal

Apa itu CKD?

Structural or functional abnormalities of the kidneys for ≥3 months, as manifested by either:

1. Kidney damage, with or without decreased GFR, as defined by

- pathologic abnormalities
- markers of kidney damage, including abnormalities in the composition of the blood or urine or abnormalities in imaging tests

2. GFR <60 ml/min/1.73 m^2, with or without kidney damage

Who is at Risk for CKD?

- Family history of heritable renal disease
- Diabetes
- Hypertension
- Auto-immune disease
- Old age
- Prior episode of ARF
- Current evidence of renal damage, even with normal or increased GFR

CKD Risk Factors*

Modifiable

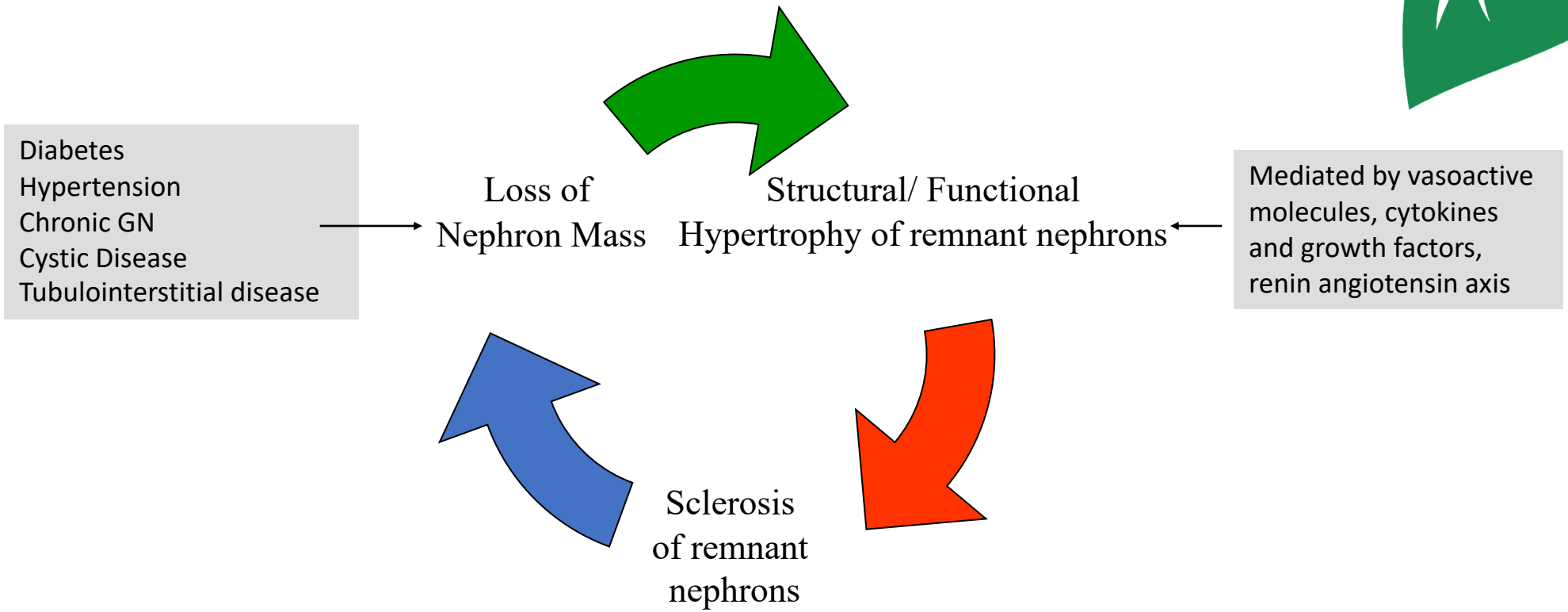
- Diabetes
- Hypertension
- History of AKI
- Frequent NSAID use

Non-Modifiable

- Family history of kidney disease, diabetes, or hypertension
- Age 60 or older (GFR declines normally with age)
- Race/U.S. ethnic minority status

Pathophysiology of CKD

- Final Common Pathway is loss of nephron mass



Estimation of GFR

- Modification of Diet in Renal Disease (MDRD) Formula
  - Estimated GFR = 1.86 (Serum Creat) $^{-1.154}$ X (age) $^{-0.203}$
    - Multiply by 0.742 for women
    - Multiply by 1.21 for African Americans
- Cockroft Gault Formula
  - $\frac{(140 - \text{age}) \text{ X Body Weight (Kg)}}{72 \text{ X Serum Creatinine (mg/dL)}}$
    - Multiply by 0.85 for women

Staging of Chronic Kidney Disease

Stage	Description	GFR (ml/min/1.73 m^2)
	At increased risk	90 (with CKD risk factors)
1	Kidney damage with normal or increased GFR	90
2	Mildly decreased GFR	60-89
3	Moderately decreased GFR	30-59
4	Severely decreased GFR	15-29
5	Renal Failure	<15 (or dialysis)

Kerentanan klien gagal ginjal kronis di keluarga dan komunitas

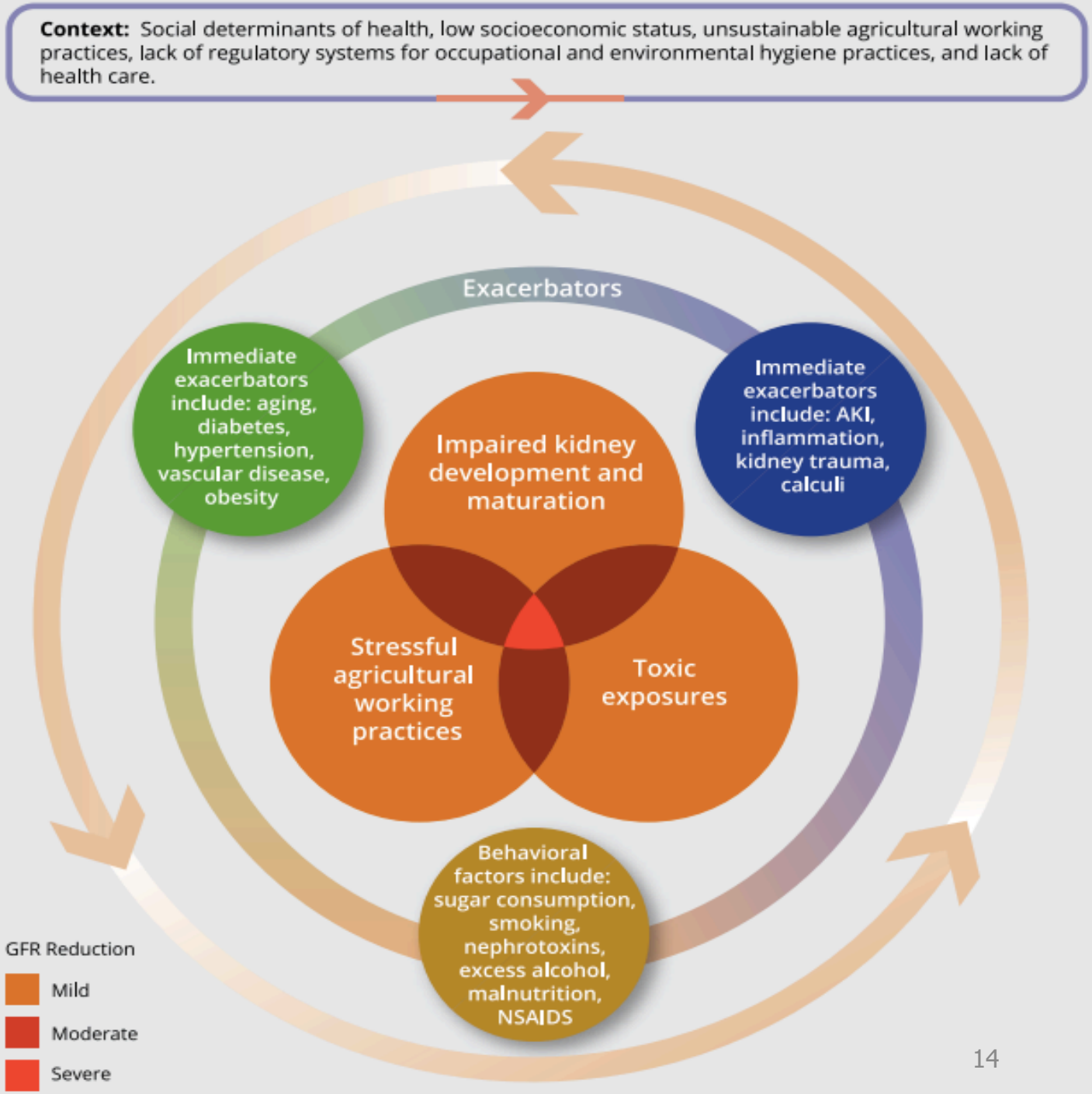
Vulnerabilitas Gagal Ginjal Kronis

Kerentanan ← **Risk Factors**

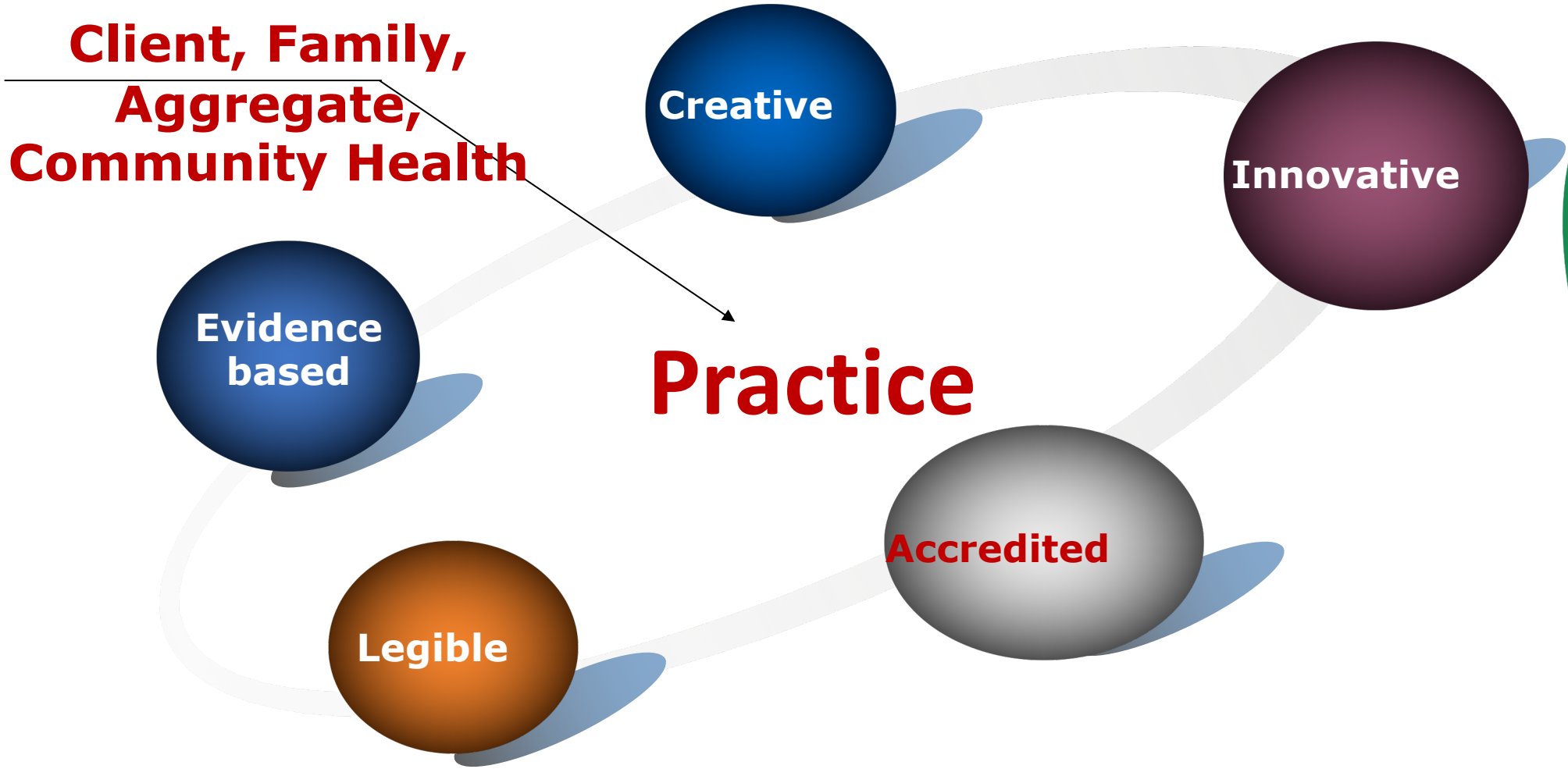
Primary health care →

- Comprehensive & Holistic care
- Case management
- Chronic care management

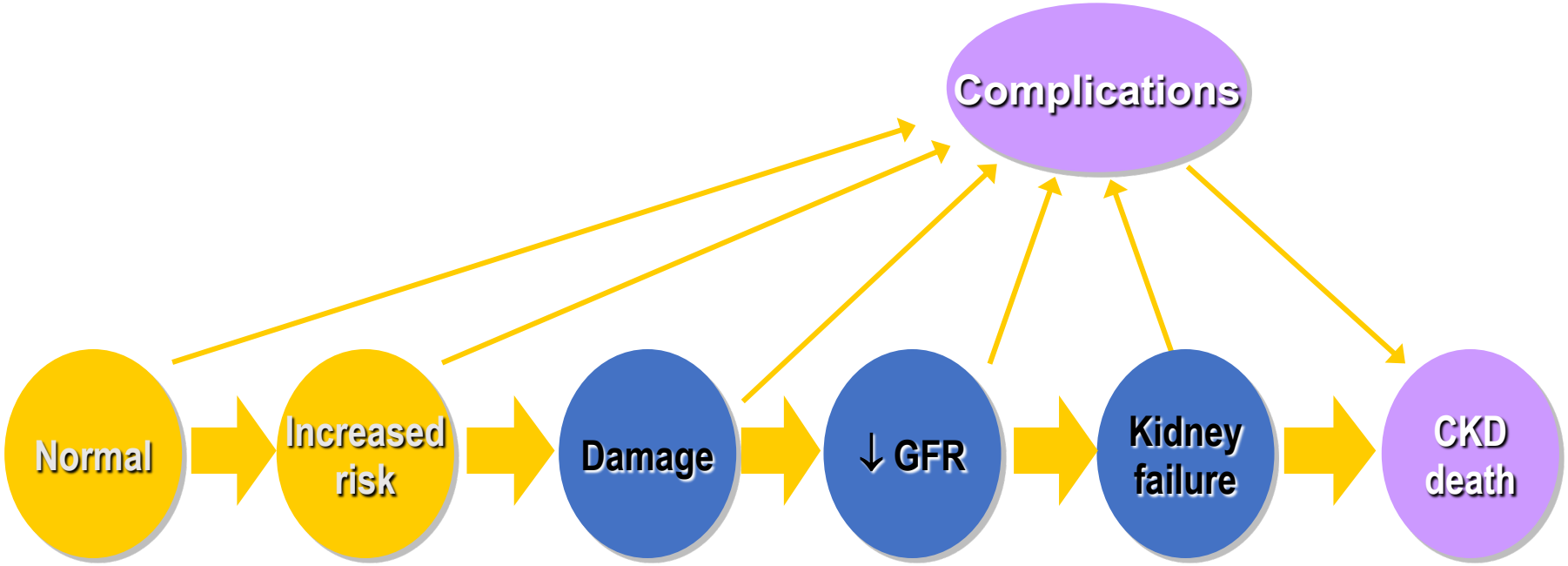
Determinan perawatan GGK



Perawatan GGK dengan pelibatan Keluarga



Stages in Progression of Chronic Kidney Disease and Therapeutic Strategies



What about PHC

From Alma-Ata to Astana: Primary health care – reflecting on the past, transforming for the future

PHC → UHC → SDGs

The Alma-Ata Declaration
"Health for All"

1978

2000

Millennium developmental goals

2015

2030
Agenda for SDGs

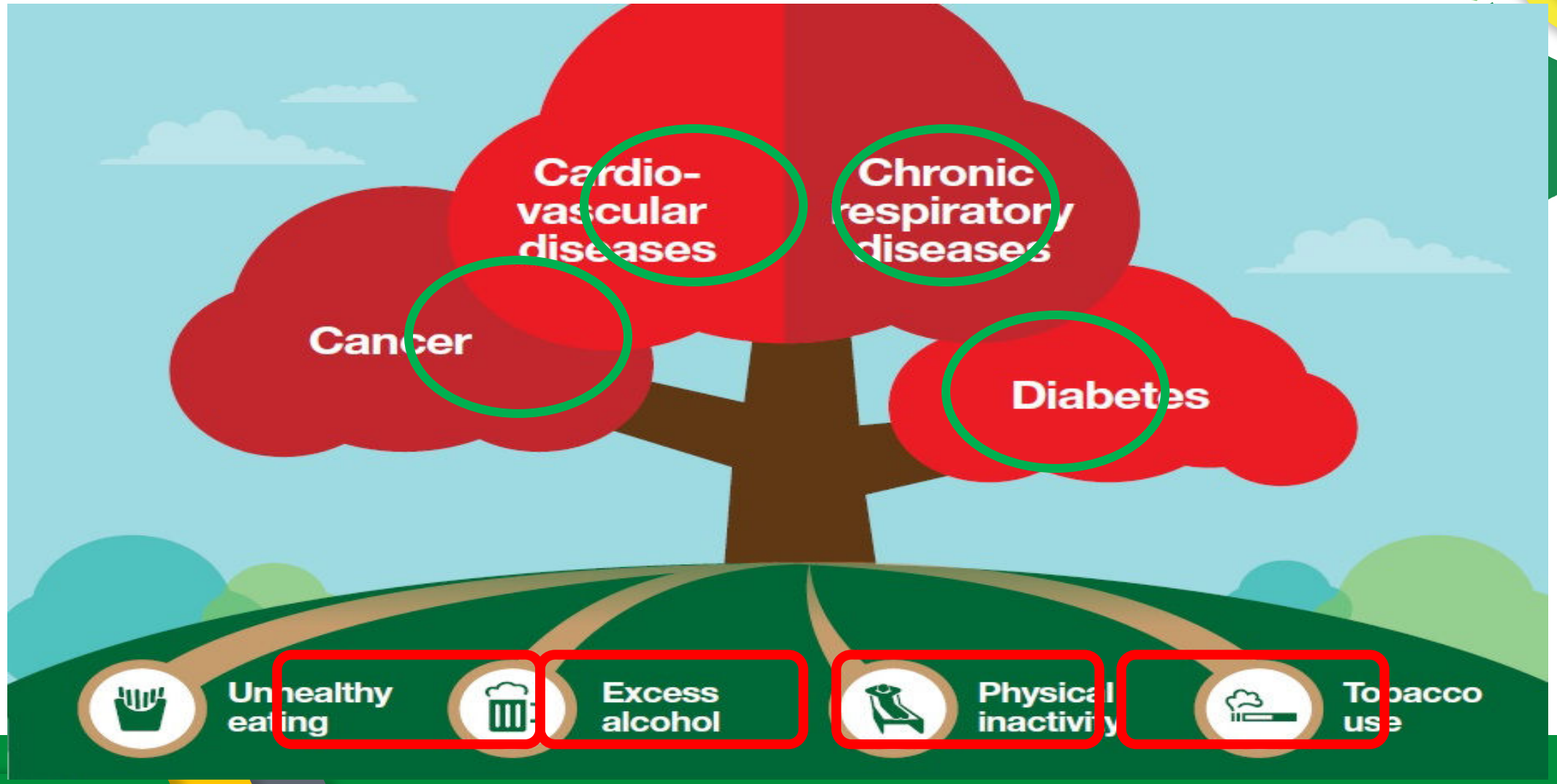
2018

2030

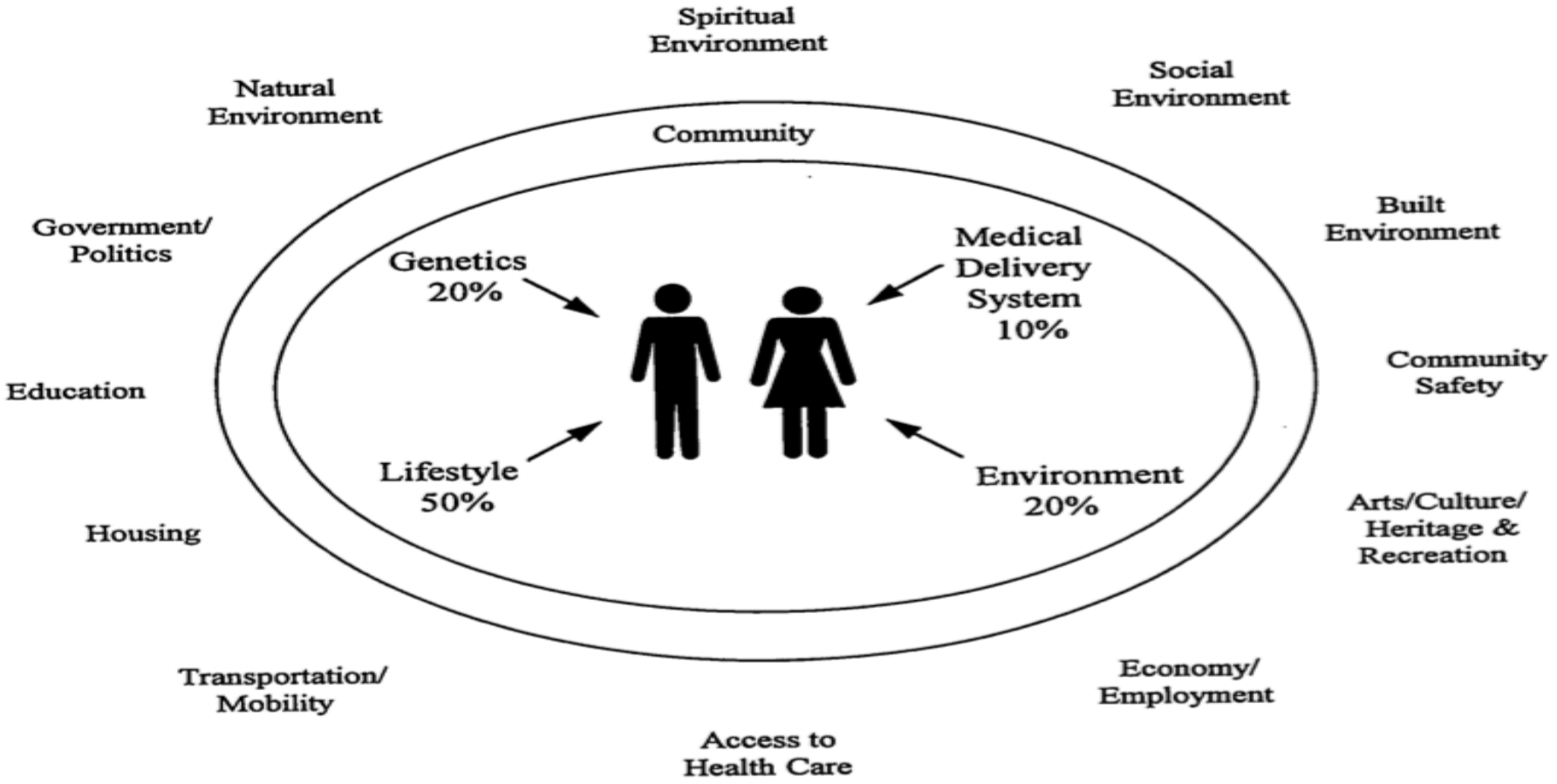
From the Declaration of Alma-Ata to the Sustainable Development Goals

Sustainable Development Goals

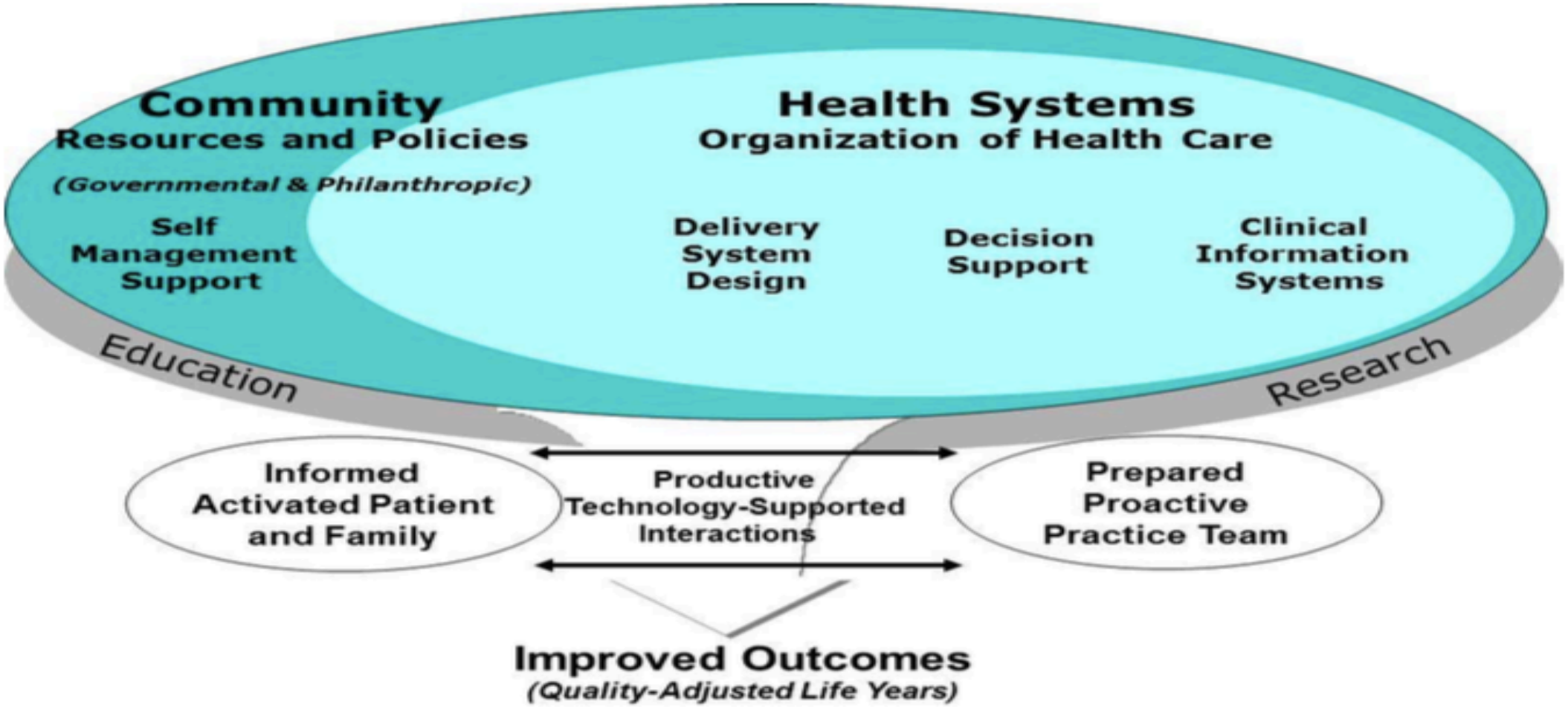
Agronursing for NCDs



Individual and community factors that influence health



Chronic Disease Model for Systematic Care Management --> Chronic renal failure ?



The Wagner Model of Chronic Care was developed by the MacColl Institute.

Pengembangan Posbindu PTM Screening CRF

KUNJUNGAN BERKALA

FAKTOR RESIKO BERLAKU	Tahun ..... Bulan 1	2	3	4	5	6	7	8	9	10	11	12	Tahun ..... Bulan 1	2	3	4	5	6	7	8	9	10	11	12
Merokok																								
Makan Sayur dan Buah < 5 Porsi Sehari																								
Kurang Aktifitas Fisik																								
Konsumsi Minuman Berakohol																								
Kesulitan Tidur Dimalam Hari Dan Kehilangan Nafsu Makan																								

No	Tanggal	Masalah Kesehatan Yang Ditemukan	Saran dan Tindak Lanjut	Tanggal dirujuk	Alasan Rujukan

KARTU MENUJU SEHAT FAKTOR RISIKO PENYAKIT TIDAK MENULAR (KMS FR-PTM)

IDENTITAS PRIBADI

No. Urut Pendaftaran : .....
Tanggal Kunjungan Pertama : .....
No. Kartu Identitas (KTP) : .....
Nama Lengkap : .....
Tanggal Lahir/ Umur (tahun) : .....
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Suku : .....
Agama : .....
Alamat : .....
Pendidikan terakhir : .....
Pekerjaan : .....
Status Perkawinan : Menikah/Tidak Menikah*
Golongan Darah : .....

KUNJUNGAN PERTAMA

Riwayat Penyakit Tidak Menular Pada Keluarga		Riwayat Penyakit Tidak Menular Pada Diri Sendiri	
Penyakit Diabetes Melitus	(Ya/Tidak)*	Penyakit Diabetes Melitus	(Ya/Tidak)*
Penyakit Hipertensi	(Ya/Tidak)*	Penyakit Hipertensi	(Ya/Tidak)*
Penyakit Jantung	(Ya/Tidak)*	Penyakit Jantung	(Ya/Tidak)*
Penyakit Stroke	(Ya/Tidak)*	Penyakit Stroke	(Ya/Tidak)*
Penyakit Asthma	(Ya/Tidak)*	Penyakit Asthma	(Ya/Tidak)*
Penyakit kanker	(Ya/Tidak)*	Penyakit kanker	(Ya/Tidak)*
Kolesterol Tinggi	(Ya/Tidak)*	Kolesterol Tinggi	(Ya/Tidak)*

*= Coret Yang Tidak Perlu

DINAS KESEHATAN KAB. OKU
SEKSI P2 PTM & KESWA
2019

PENGUKURAN FAKTOR RESIKO PENYAKIT TIDAK MENULAR

KUNJUNGAN BERKALA

Tolak Ukur	Nilai	Tahun ..... Bulan 1	2	3	4	5	6	7	8	9	10	11	12	Tahun ..... Bulan 1	2	3	4	5	6	7	8	9	10	11	12
Indeks Massa Tubuh	> 25kg/m2																								
	23 - 25kg/m2																								
	18,5 - 22,9 Kg/M2																								
Lingkar Perut	P > 90CM ; W > 80CM																								
	P > 90CM ; W > 80CM																								
Tekanan Darah	>140/90mmHg																								
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	< 130/80/mmHg																								
Gula Darah Sewaktu	> 200mg/dL																								
	145 - 199 mg/dL																								
	80 - 144 mg/dL																								
Kolestrol Total	> 190mg/dL																								
	150 - 189 mg/dL																								
	<150 mg/dL																								
Trigliserida	>150 mg/dL																								
	140 - 150 mg/dL																								
	< 140 mg/dL																								
Benjolan Tidak Normal Pada Payudara	Ditemukan																								
	Tidak Ditemukan																								
Arus Pernafasan Ekspirasi (APE)	< Nilai Prediksi (ltr/mnt)																								
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Inspeksi Visual Asam Asetat (IVA)	Positif																								
	Negatif																								
Kadar Alkohol Pernafasan	Positif																								

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Tes Amfetamin Urin	Positif																								
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Penyakit Jantung	(Ya/Tidak)*	Penyakit Jantung	(Ya/Tidak)*
Penyakit Stroke	(Ya/Tidak)*	Penyakit Stroke	(Ya/Tidak)*
Penyakit Asma	(Ya/Tidak)*	Penyakit Asma	(Ya/Tidak)*
Penyakit Kanker	(Ya/Tidak)*	Penyakit Kanker	(Ya/Tidak)*
Kolesterol Tinggi	(Ya/Tidak)*	Kolesterol Tinggi	(Ya/Tidak)*

* = Coret yang tidak perlu

Kementerian Kesehatan RI
Direktorat Jenderal PP dan PL
Direktorat Pengendalian Penyakit Tidak Menular
2013

Perawatan klien gagal ginjal kronis di keluarga dan komunitas

Keluarga dalam perawatan

Perawat yang bekerja di Komunitas, umumnya melibatkan keluarga dalam perawatan

CHN harus mampu memahami interkasi dan dinamika keluarga, sehingga mampu memberikan asuhan keperawatan yang tepat (pengkajian, diagnosis, perencanaan, tindakan, dan evaluasi)

Pemahaman terhadap dinamika keluarga dan konteks komunitas mebantu perawat dalam perencanaan perawatan

Saat keluarga sebagai klien, perawat menentukan status kesehatan keluarga dan indivdu anggota keluarga, tingkat fungsi keluarga, kekuatan dan kelemehan interaksi keluarga

Tugas Kesehatan Keluarga (Bailon & Maglaya, 1978)

KMK Mengenal Masalah

KMK Mengambil Keputusan

KMK Merawat

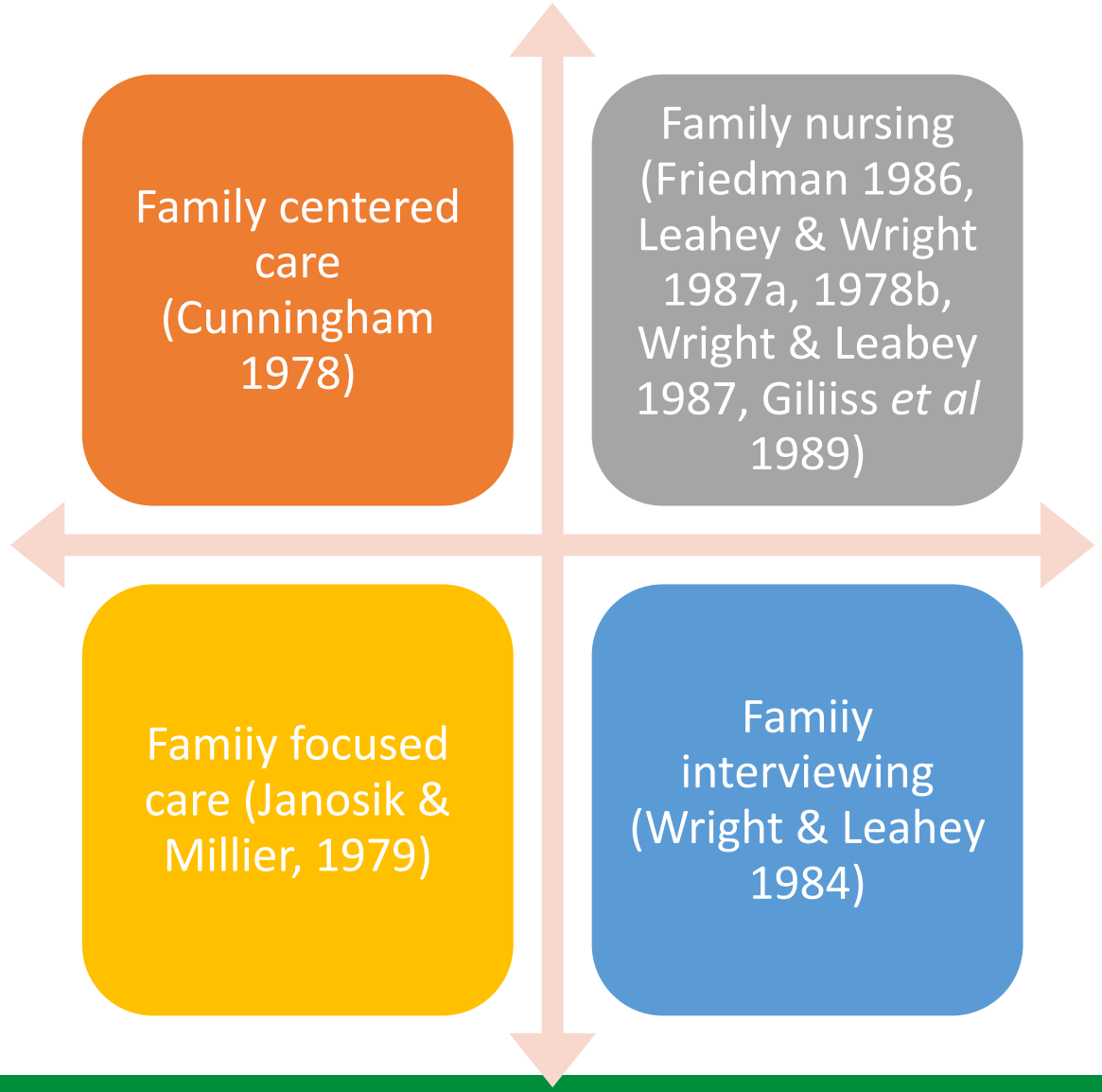
KMK Memelihara lingkungan

KMK mengakses layanan sosial dan kesehatan

FUNGSI PERAWATAN KESEHATAN---(Friedman, 2003)?

- Keyakinan kesehatan, nilai2, perilaku keluarga
- Definisi sehat-sakit dari keluarga dan tingkatan pengetahuannya
- Status kesehatan yang diketahui keluarga dan kerentanan terhadap penyakit
- Praktik diit keluarga
- Kebiasaan tidur dan istirahat
- Latihan fisik rekreasi
- Kebiasaan penggunaan obat2an keluarga
- Peran keluaraga dalam praktik perawatan diri
- Tindakan preventif medis dasar
- Praktik perawatan gigi
- Riwayat kesehatan keluarga
- Pelayanan kesehatan yang diterima
- Perasaan dan persepsi terhadap yankes yang diterima
- Pelayanan perawatan gawat darurat
- Sumber pembiayaan
- Logistik perawatan yang diperoleh

TREND: INCREASED DIVERSITY IN CLINICAL PRACTICE



Pencegahan PGK Bila ditemukan Tanda dan Gejala

C: Cek kesehatan secara berkala,

E: Enyahkan asap rokok,

R: Rajin aktifitas fisik,

D: Diet sehat dengan kalori seimbang,

I: Istirahat yang cukup dan

K: Kelola stress

Terapi PGK


Kontrol gula darah pada penderita diabetes,
Pengaturan pola makan yang sesuai dengan kondisi ginjal
Kontrol tekanan darah pada penderita hipertensi,

Pencegahan Primer

- Terapi dengan obat-obatan
- Transplantasi (cangkok) ginjal
- Dialisis (cuci darah)
- Modifikasi gaya hidup

Pedoman untuk gaya hidup pasien dengan gagal ginjal kronik

- Berhenti merokok
- Mengurangi berat badan → IMT 18.5- 24.9 kg/m2
- Kontrol protein diet (0.8- 1.0 g/kg/ hari)
- Asupan alkohol
- Olahraga (30-60 menit) / 4-7 hari per minggu
- Asupan garam (65- 100mmol/hari)

What can primary care providers do?

Recognize and test at-risk patients

Educate patients about CKD and treatment

Manage blood pressure and diabetes

Address other CVD risk factors

Monitor eGFR and ACR (encourage labs to report these tests)

What can primary care providers do?

- Evaluate and manage anemia, malnutrition, CKD-MBD, and other complications in at-risk patients
- Refer to dietitian for nutritional guidance
- Consider patient safety issues in CKD
- Consult or team with a nephrologist (co-management)
- Refer patient to nephrology when appropriate

Intervensi

Intervensi

- Terapi yang diberikan
- Aktivitas perawat

Tindakan

- Sesuatu yang dilakukan
- Kemajuan dari suatu asuhan

SIKI

- Intervensi utama
- Intervensi tambahan

Dampak gagal ginjal kronis di keluarga dan komunitas

The impact on family life

Time management

- A patient who needs dialysis for three days or nights a week in a center, needs good time management to balance their dialysis schedule with other activities, and needs as well.
- That time-balancing-act may well take a few weeks to adjust and figure out a new schedule that works for you and your family.

Nutrition

- As limits on potassium, phosphorus, salt and fluids intake are often recommended for people with kidney disease, meal preparation has to be adjusted for the patient and their family.
- Trying a “build your own” meal approach, where each family member can add ingredients to their own plate.

The impact on the patient

How kidney disease feels physically

- The symptoms of kidney disease may physically include the feeling of having a flu all the time. For example, the person with kidney disease may feel:

Tiredness and weakness

- They may feel tired and weak, so that it's hard for them to manage walking up a flight of stairs or take a walk around the block. They may feel the need to sleep more than they usually do.

Coldness and temperature

- They may feel cold all the time, as if they have a fever.

Lack of concentration and forgetfulness

- They may have trouble concentrating or may forget things more than is usual for them. These symptoms are most often due to anemia - a shortage of red blood cells - which can be treated.

Family Issues

- How can a parent handle having to make difficult medical decisions for a child who has chronic kidney disease?
- How can the parents of a child who has kidney disease handle discipline?
- How should parents talk to their child about the death of a close friend in the dialysis unit?
- How should parents explain kidney disease?
- Can the responsibility of helping a parent who has chronic kidney disease be harmful for a young child or teenager?
- What is the best way to help an elderly parent who has chronic kidney disease?
- What should the family do if the patient is not following medication and diet guidelines?

The most frequently mentioned outcomes of caregiving over a lengthy period of time

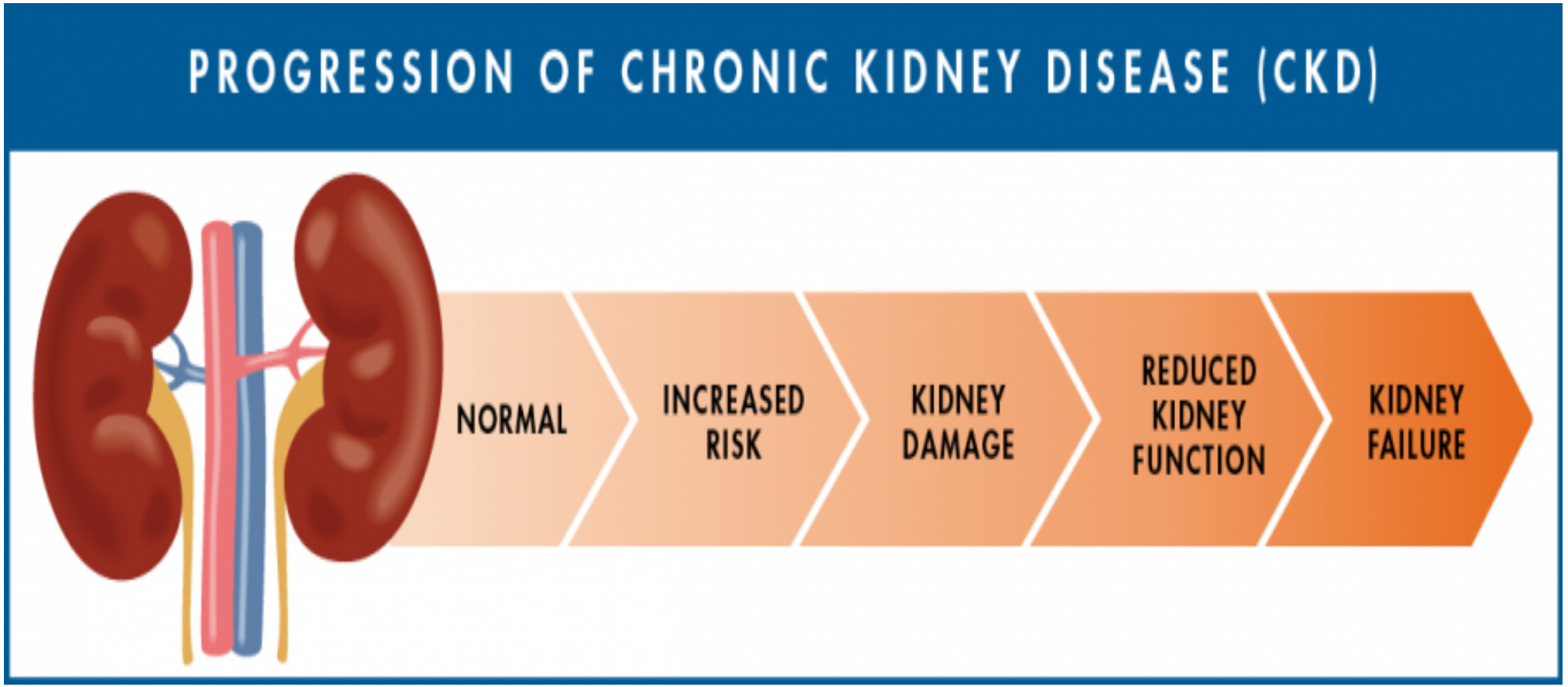
- Loneliness and isolation.
- Depression.
- Frustration, anger, and guilt.
- Loss of emotional closeness between caregivers and partners.
- Loss of freedom and time for one's own interests and development.
- Fatigue from added roles.
- Burnout and being overwhelmed.
- Negative effects on relationships with friends, relatives, and neighbors.
- Restricted or no involvement in the community.
- Restricted or no involvement in church and spiritual activities.

Pengalaman keluarga saat dialisis

Coping with a restricted lifestyle

Reacting to mood changes and the emotional highs and lows of living with ESRD

Perawatan berkelanjutan bagi klien gagal ginjal kronis di keluarga dan komunitas


PROGRESSION OF CHRONIC KIDNEY DISEASE (CKD)
NORMAL
INCREASED RISK
KIDNEY DAMAGE
REDUCED KIDNEY FUNCTION
KIDNEY FAILURE

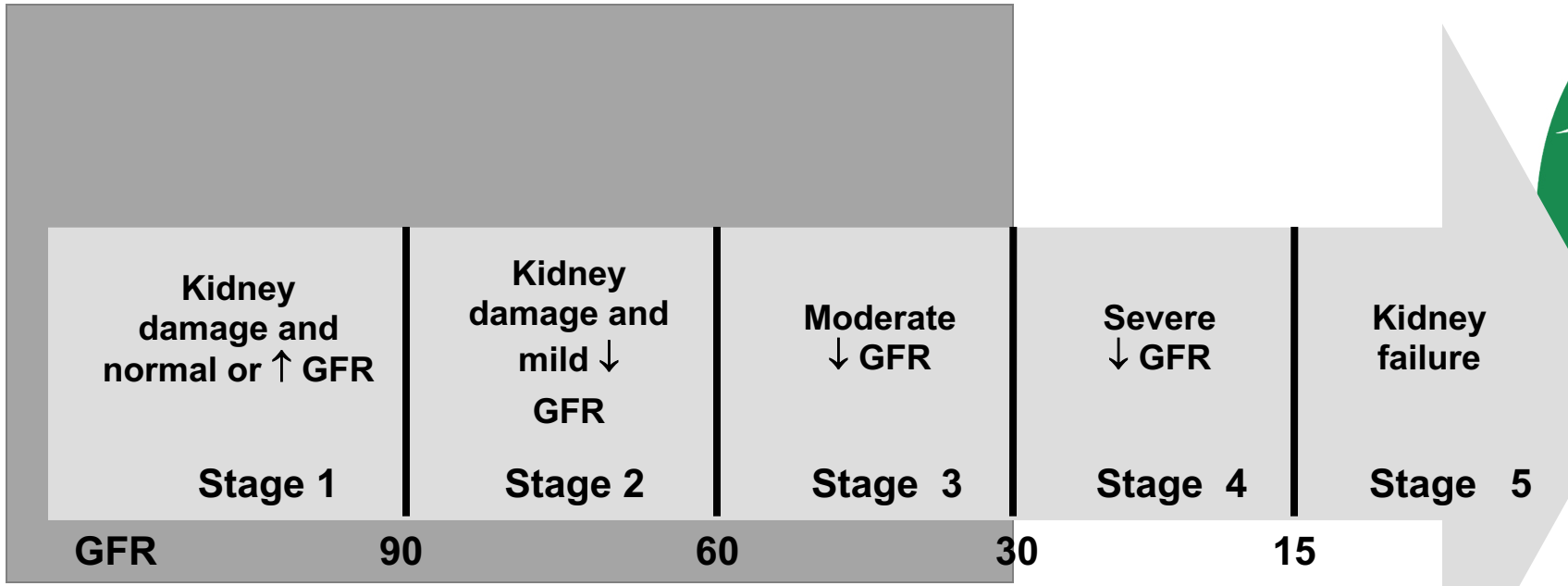
PD treatment goals or PD clinical performance measures

- Total (residual kidney + peritoneal) Kt/Vurea ≥ 1.7 per week or total creatinine clearance ≥ 50 L/week/1.73 m2
- Peritoneal net ultrafiltration in anuric patients ≥ 1.0 L/day
- Albumin ≥ 3.5 g/dL
- Hemoglobin ≥ 10.0 and ≤ 12.0 g/dL
- Transferrin saturation = 30–50%
- Serum ferritin ≥ 200 and ≤500 μg/L
- Phosphorus ≥ 3.5 and ≤ 5.5 mg/dL
- Calcium × Phosphorus < 55 mg2 /dL2
- Intact PTH ≥150 and ≤600 pg/mL
- Predialysis mean arterial blood pressure < 105 mmHg
- Clinic peritonitis rate <1 episode/24 patient-months
- Hepatitis B & C seroconversion = 0%

HD treatment goals or HD clinical performance measures

- Prevalance of AV Fistula
- Dialysis ≥3 times/week
- Dialysis duration ≥4 hr
- Arterial blood flow rate (QB) ≥ 300 mL/min
- Kt/V ≥ 1.4
- Intradialytic body weight gain <4%
- Mean arterial BP ≤ 105 mmHg
- Transferrin Saturation = 30–50%
- Serum Ferritin = 200–500 ng/mL
- Hemoglobin = 10–12 gm/dL
- Phosphorus = 3.5–5.5 mg/dL
- Calcium = 8.8–10 mg/dL
- Calcium X Phosphorus < 55 mg2/dL2
- PTH = 150–600 pg/mL
- Serum albumin > 3.5 gm/dL
- Bicarbonate > 20 mEq/L
- Hepatitis B & C seroconversion = 0%

Who Should be Involved in the Patient Safety Approach to CKD?



Patient safety

The Patient (always)
and other subspecialists (as needed)

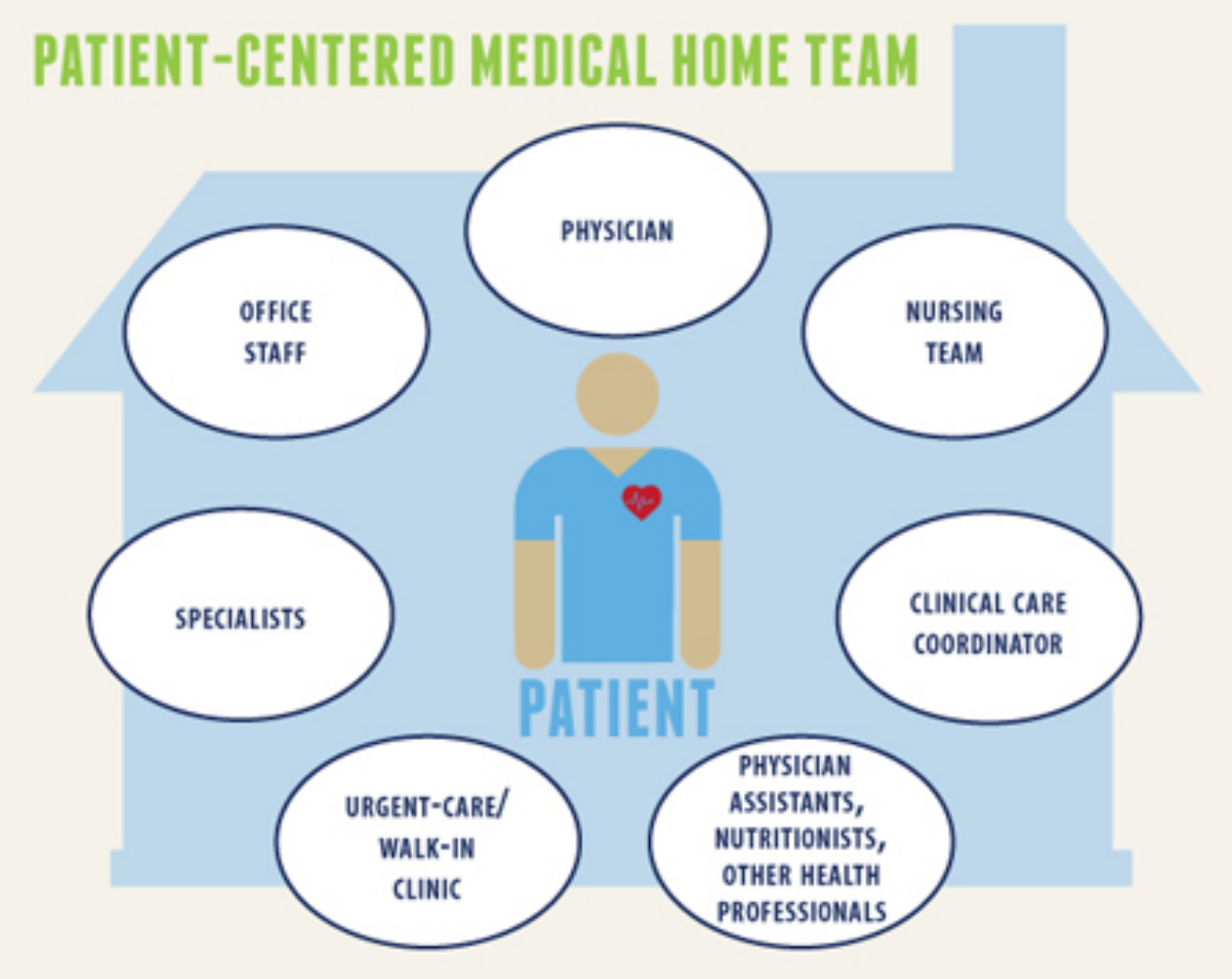
Comprehensive conservative care

Comprehensive conservative care is planned (holistic patient–centered care for patients with stage 5 [GFR category 5] CKD) that includes:

- Interventions to delay progression of kidney disease and minimize risk of adverse events or complications Shared decision making
- Active symptom management
- Detailed communication, including advance care planning
- Psychologic support
- Social and family support
- Cultural and spiritual domains of care

Comprehensive conservative care does not include dialysis

Co-Management Model



- Collaborative care
  - Formal arrangement
  - Curbside consult
- Care coordination
- Clinical decision support
- Population health
  - Development of treatment protocols

Collaborative Care Agreements

Soft Contract between primary care and nephrologist

Defines responsibilities of primary care

- Provide pertinent clinical information to inform the consultation prior to the scheduled visit.
- Initiate a phone call if the condition is emergent
- Provide timely referrals with adequate number of visits to treat the condition.

Defines responsibilities of nephrologist

- Timely communication of consultation (7 days routine & 48 hours emergent) – fax if no electronic information sharing
- No consultation to other specialist initiated without primary care input

Benefits of early referral of patients with chronic kidney disease

- Prevention and management of CKD modifiable risk factors
- Optimization of treatment of CKD
- Preservation of functioning nephrons and delaying the progression of renal failure
- Access to structured psychoeducational program
- Adaptation of CKD patient to RRT treatment
- Preparation and creation of suitable dialysis access with less temporary vascular access
- Training on selected modality of RRT with better compliance
- Preemptive kidney transplantation
- Reduction of cardiovascular morbidity and mortality
- Reduction of costs

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