Primary care, collaborative and community-based models of care for people with CKD

CKD.CRE
NHMRC Chronic Kidney Disease Centre of Research Excellence

Geoffrey Mitchell

Wendy Hoy

Ann Bonner

Jenny Zhang

Zaimin Wang

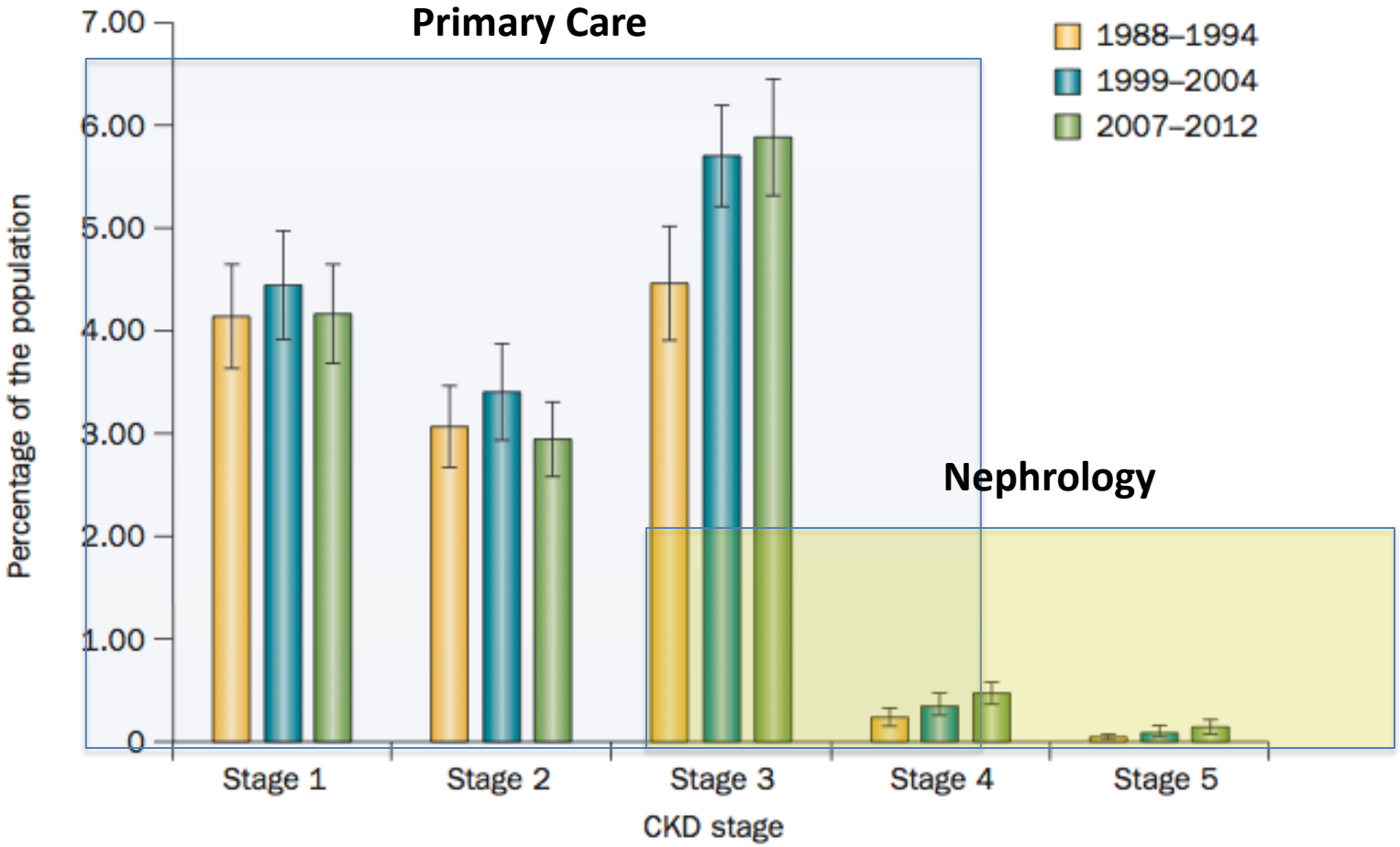
Anne Cameron

Tracey Johnson

Robin Armstrong

Odewumi Adegbija

Community prevalence – USA



Wouters O et al. Nature Reviews Nephrology 2015: 11(8): 491-502

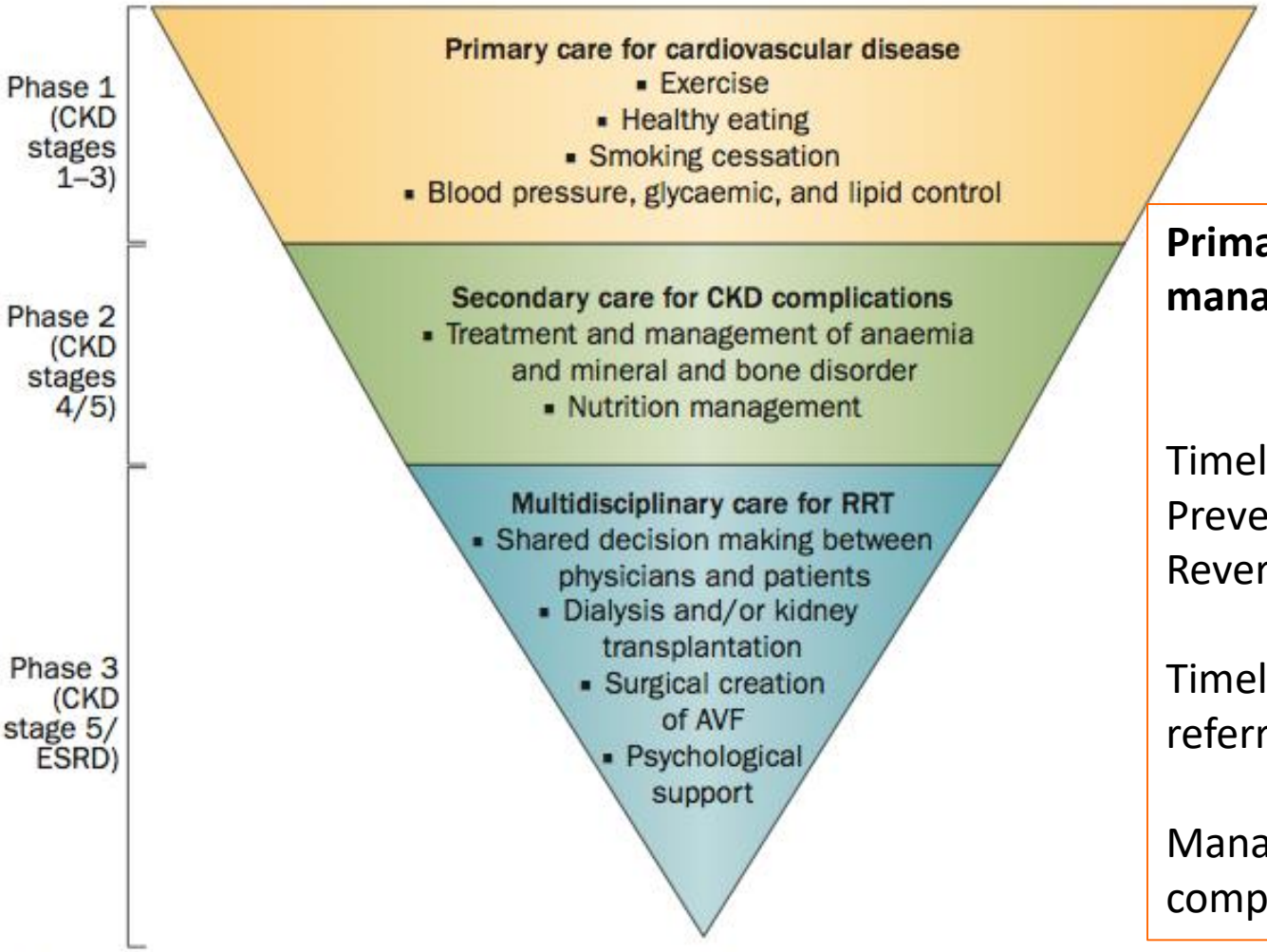


Figure 4 | An integrated care continuum for CKD that is consistent with the chronic care model. Abbreviations: AVF, arteriovenous fistula; CKD, chronic kidney disease; ESRD, end-stage renal disease; RRT, renal replacement therapy.

Primary Care role in CKD management

Timely diagnosis
Preventing deterioration
Reversal of deterioration

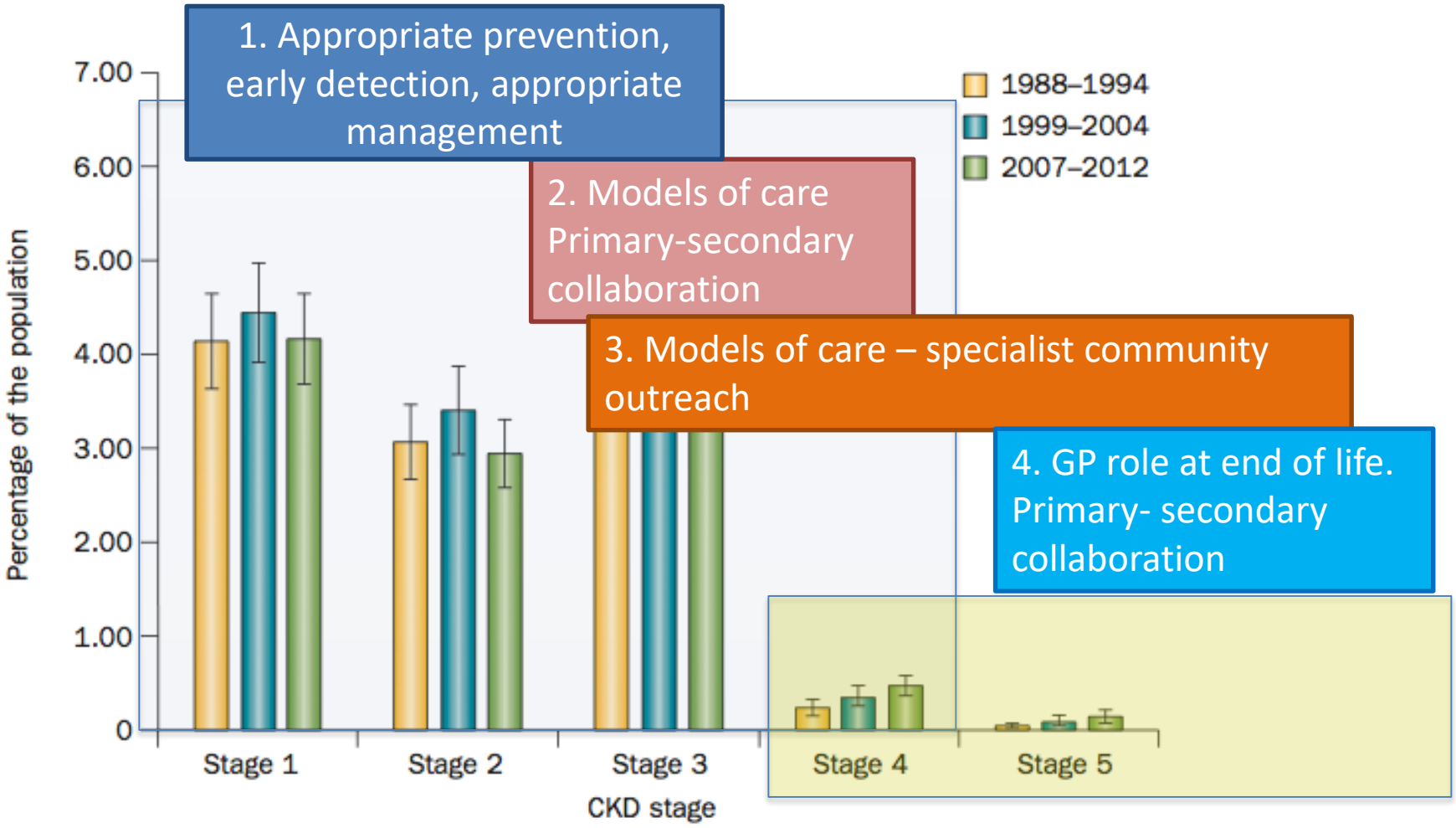
Timely and appropriate referral

Management of complications

Wouters O et al. Nature Reviews Nephrology 2015: 11(8): 491-502

Primary/community care projects

CKD.CRE
NHMRC Chronic Kidney Disease Centre of Research Excellence



Wouters O et al. Nature Reviews Nephrology 2015: 11(8): 491-502

Right place
Right time
Right person

- Are the right people being referred to specialist nephrology?
- Are the right people being referred from specialist nephrology back to primary care?
- What is the role of primary care in ongoing CKD?
- Value of deliberate screening for renal disease vs opportunistic detection in other disease states?
- Which patients can be safely managed in primary care?
- Who and how should be managing the medical care of people with CKD at different points along the continuum?

CKD.CRE
NHMRC Chronic Kidney Disease Centre of Research Excellence

Prevention, detection and management of CKD in Primary Care

- Primary Care Referral project
- The Queensland Health Data Linkage Project

Models of Care


- The “Keeping Kidneys” project


- The integrated Chronic Disease Nurse Practitioner project


- Telehealth


- GP-Specialist Case Conferencing for ESKD

Primary care prevention, detection, management of CKD.

CKD.CRE
NHMRC Chronic Kidney Disease Centre of Research Excellence

Primary care referral project

The vast majority of people with CKD in Australia are under the care of their general practitioner, most never see a nephrologist.

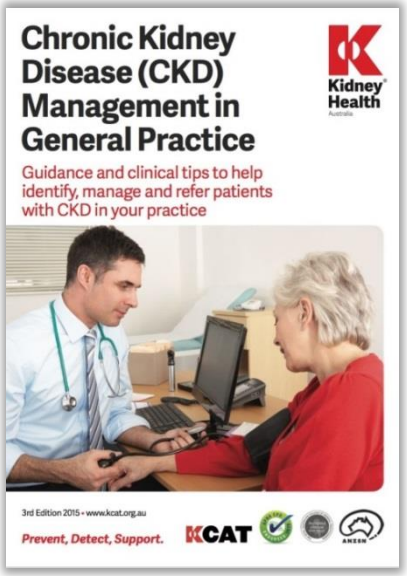
Questions:

1. To what extent are GPs following KHA CKD management guidelines?
2. To what extent are GPs referring appropriate patients to specialist nephrology services?

Aim: to assess the level of compliance with KHA diagnostic and management guidelines in the referral of patients to a renal specialty clinic.

Method

The primary care referral project is an audit of 163 GP referrals to the Kidney Health Service, Metro North Hospital and Health Service, utilising CKD.QLD registry data.



Primary care prevention, detection, management of CKD.

CKD.CRE
NHMRC Chronic Kidney Disease Centre of Research Excellence

The Queensland Health Data Linkage project

Aim: To detect and characterize patients with CKD who are not in CKD.QLD (and will most likely be in primary care), to compare them with CKD.QLD patients and to describe health service utilisation and costs for both groups

It will provide an Australian-first opportunity to understand the entire scope of a patient on their CKD journey across the health care continuum (primary care>renal specialty clinics>death or renal replacement therapy).

This will be presented in more detail by Dr Jenny Zhang

Models of Care 1

CKD.CRE
NHMRC Chronic Kidney Disease Centre of Research Excellence

Primary secondary collaboration: the Keeping Kidneys Project

Aim: To establish and evaluate a joint GP/Specialist Nephrology clinics
To build capacity for primary care managements of such patients.

Collaborators: Tracey Johnson, Helen Healy, Robin Armstrong, David Chambers, Raylene Steinhardt, Renal physicians – Carolyn van Eps, Youngjee Cho. Descriptive reports- CKD.QLD team

A trial of the Beacon Practice Model for diabetes care, translated to CKD.

Nephrologists and GPs with special interest in CKD see patients jointly. It includes a nurse led literacy program. The program liaises with patient's primary GP to increase their knowledge and skill.

Cost effectiveness of current model not proven. - Requires throughput to make viable, financial support to provide essential administrative services.

Metro North is establishing a different version of the KK model in its HHS district.

Models of Care 2

CKD.CRE
NHMRC Chronic Kidney Disease Centre of Research Excellence

Integrated Chronic Disease Nurse Practitioner project

Aim: To evaluate a novel, integrated model of care provided by nurse practitioners (NPs) for patients with comorbid chronic diseases (CKD, DM, HF).

Investigators: Ann Bonner, Clint Douglas, Cassandra Stone, Maureen Barnes, Jennifer Abels, Karen Mills & Kathryn Havas

Design: Prospective, longitudinal mixed methods using Donabedian framework to examine the structure, processes and outcomes of the new model of care

Site: Clinic sites have varied since commencing, operating predominately from community health centres (Browns Plains and Beaudesert) and Logan hospital outpatients

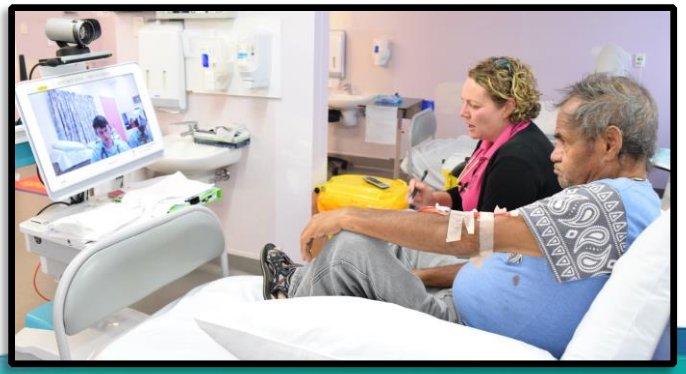
Data: Clinical records, hospital databases to capture occasions of service (outpatients, ED & admissions), patient-reported outcomes, qualitative (interviews & focus groups). We now have over 2 years of data.

Models of Care 3

Telehealth

Telehealth in CKD care 1. A multi-site study of internet and mobile phone use by people with CKD, (Ann Bonner and colleagues). The study is completed (n = 708) and being written up.

Telehealth in CKD care 2. In an initiative started in 2011, under direction of Dr Sree Krishna Venuthurupalli ("Sree", senior nephrologist and CRE PhD student), and in collaboration with Andrea Rolfe, Kingaroy CKD Nurse Practitioner. *Bringing specialist renal care to the community*.
*Sree will present this later



Models of Care 4

Future work

GP-Specialist Case Conferences in ESKD

ESKD patients who elect not to progress to Renal replacement therapy have major health care needs.

Questions

Which needs have to be managed at specialist level, what can be managed at primary care level?

How the two levels of care could work in an integrated fashion to maximise the effectiveness of both

Method

Implementation study of integrated case conferences generating a joint clinical care plan

Summary

CKD.CRE
NHMRC Chronic Kidney Disease Centre of Research Excellence

- CKD is very common, and part of multi-morbidity, which GPs manage continuously.
- GP roles encompass the spectrum from prevention and early detection, to palliative care.
- The nature of GP care is hard to ascertain accurately, but essential to know so appropriate patient and specialist expectations can be met.
- Models of care research is required to ensure that specialist expertise is delivered when necessary, that ongoing CKD management is done at the right place and the GP management patient needs are met.