Integrated ESRD Care

Anjay Rastogi MD PhD
Professor and Clinical Chief
Director : UCLA ESRD and Dialysis Program
Division of Nephrology | Department of Medicine
David Geffen School of Medicine
UCLA Health
UCLA PD Program

- 150 patients and growing
- Very low drop out rate due to technique failure
- High transplant rate
- Home penetration 25 – 55 percent
- Home first
- Strong leadership
Home penetration in the US

Prevalent Home Dialysis Patients

Numbers of Patients (in thousands)

Prevalent Patients

Numbers of Patients (in thousands)

Total Dialysis Population
466,607
Country specific modalities

Percentage of Patients, by Modality for 2013

% of Patients

In-Center HD  Peritoneal Dialysis  Home HD

USRDS 2015
The Five Stages of Chronic Kidney Disease

- **Stage 1**: Kidney Damage with Normal or ↑ GFR
  - GFR (mL/min/1.73m²) ≥90

- **Stage 2**: Kidney Damage With Mild ↓ GFR
  - 60-89

- **Stage 3**: Moderate ↓ GFR
  - 30-59

- **Stage 4**: Severe ↓ GFR
  - 15-29

- **Stage 5**: Kidney Failure
  - <15 or dialysis

GFR=glomerular filtration rate

# Optimal CKD Patient Care

## Early Detection Of CKD

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**Cardiac Disease**

**Vascular Disease**

**Diabetes**

**Anemia**

**Malnutrition**

**Osteodystrophy**

**Acidosis**

**Delay Progression**

**Prevent Complications**

**Prepare for RRT**

**Select RRT Modality**

**Create Access & Initiate Dialysis in a Timely Fashion**
Modality Options for Advanced Kidney Disease

- Dialysis
  - In-Center Hemo-Dialysis (ICHD)
  - Home Dialysis
    - Peritoneal Dialysis
    - Home Hemo-Dialysis
- Transplant
  - Cadaveric
  - Living Donor (related/unrelated): Pre-emptive
- Conservative management
Home Dialysis

- Chronic Kidney Disease (CKD) Clinics
- In-Center Hemodialysis (ICHD)
- Hospitals
- Transplantation
Integrated Dialysis Care

In-Center Hemodialysis (ICHD)

Peritoneal Dialysis (PD)

Home Hemodialysis (HHD)

IDT
Nephrologists
Nurses
Dietitians
Social Workers

Clinics

Transplantation

PCP
Surgical/IR

Hospitals

Coordinator of Care
Home HD and PD Programs are Complementary

- Does a robust PD program hinder growth of HHD?
- Do HHD programs grow by cannibalizing PD?
  - Not necessarily, both can grow simultaneously
  - Educating patients about therapy choice is key
- "Wellbound model" - 83.5% PD, 16.6% HHD
  - 986 patients referred for home therapy evaluation
  - 45.8% (452) chose home therapy of which 79.2% (358/452) chose PD
Role of Hospital - CRITICAL

- Admissions
- Crashers
- Incident vs Prevalent
- Not an uncommon place for loss
- Appropriate discharge – role of case manager
Urgent Starts
Transitional Care Units (TCU)

- New starts
- Education
- Special staffing
- Coordination of care
- Focus not just home growth but also improved outcomes ICHD and transplantation
CORE Dialysis Team

- Nephrologist and advanced practitioners
- Nurse
- Dietitian
- Social Worker
- Staff
- Coordinator / case managers
Extended Team

- Surgeon, IR
- CKD Clinic
- Hospital
- Pharmacy
- Extensivist
- Transplant Team
- Population Health and QI
Assisted PD
Extensivist Team
Stand alone Home Programs
Summary

- ESRD care should be integrated for best outcomes
- Coordination of care and services
- Modality education including transplant and conservative management should be discussed
- Shared decision making
- Team approach critical
Thank you!