Integrated Care Management for Patients with Advanced Kidney Disease: Results from the CMS Demo Project

Care Continuum Alliance: The Forum 11

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Medical Home: CKD and ESRD

- The proverbial Four Questions

1. Why is a PCMH important for CKD/ESRD patients?
2. What does this home look like?
3. How can you build it?
4. How do you integrate it?

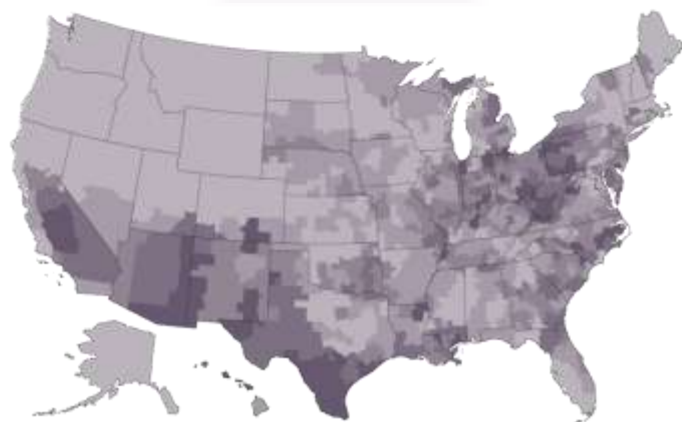
- What are we trying to do?
- What are we trying to avoid?

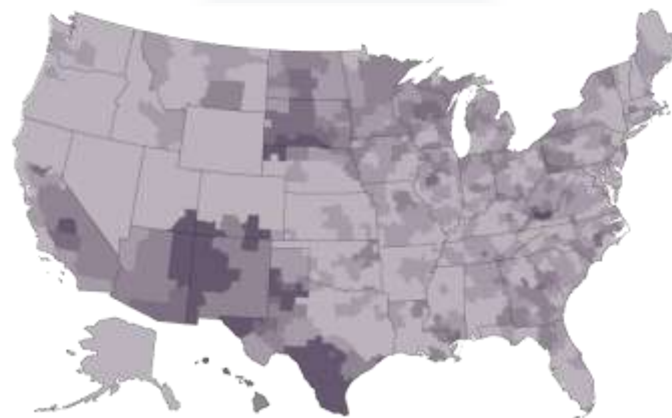
Tidal Wave of Disease: ESRD

Incidence

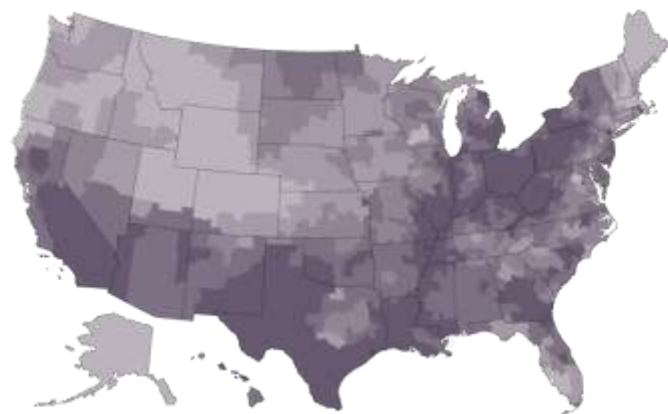
Prevalence

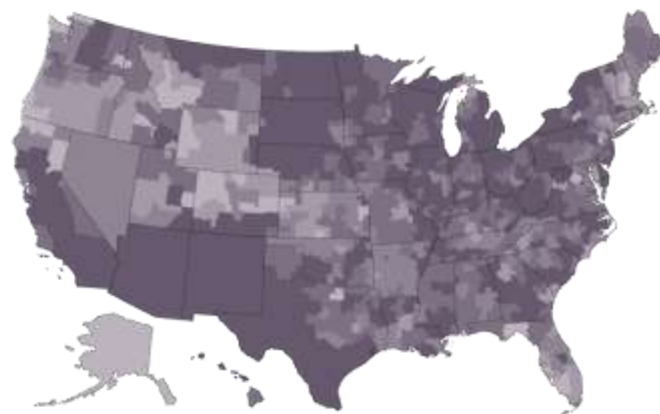
1998





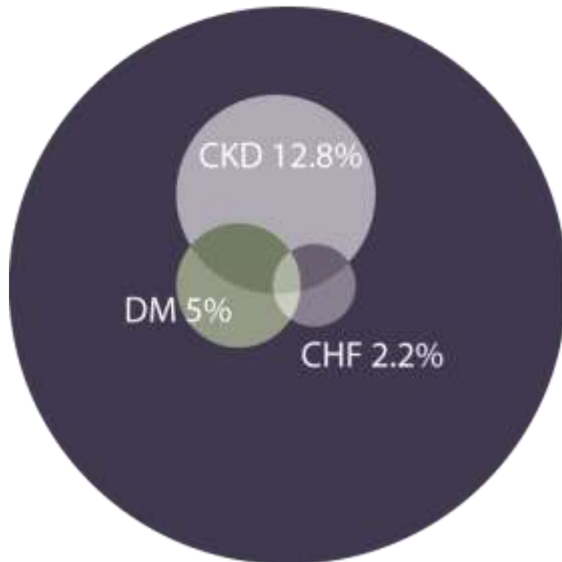
2008

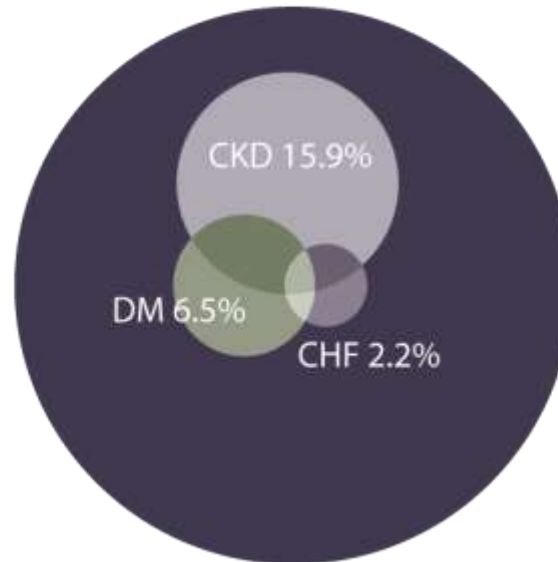


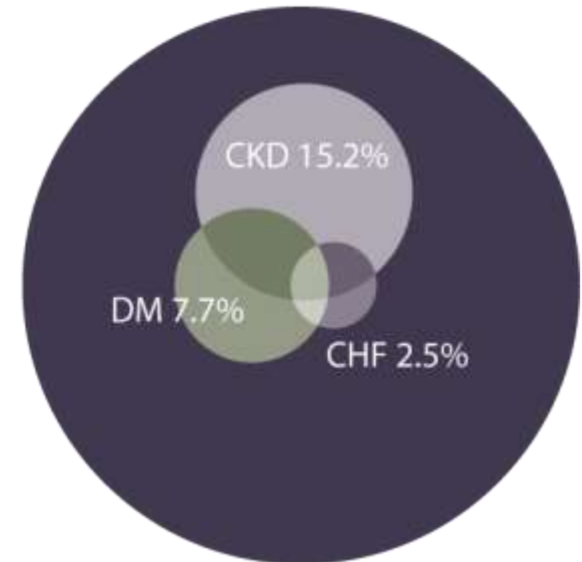


USRDS, 2010

CKD: Prevalence

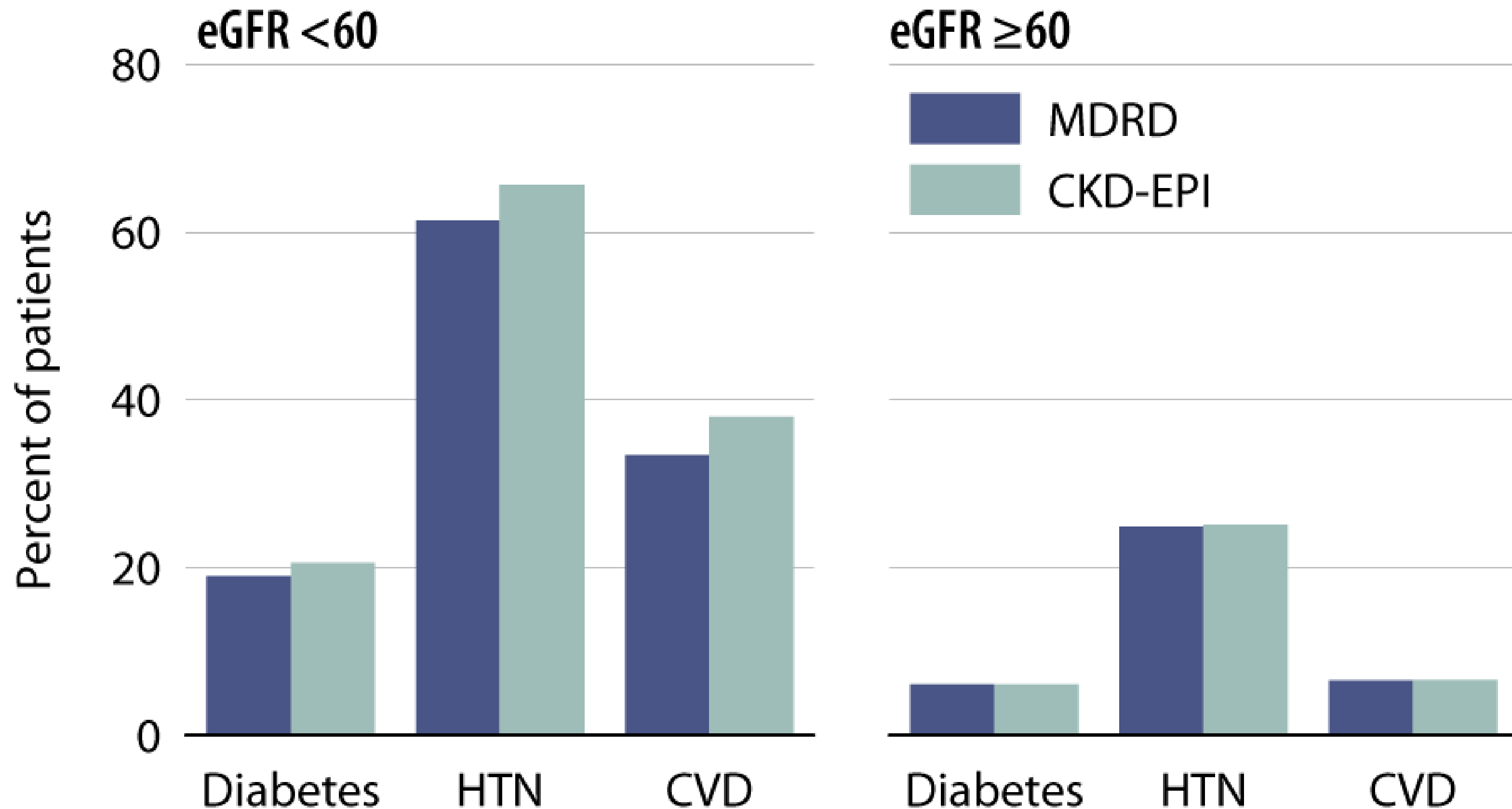






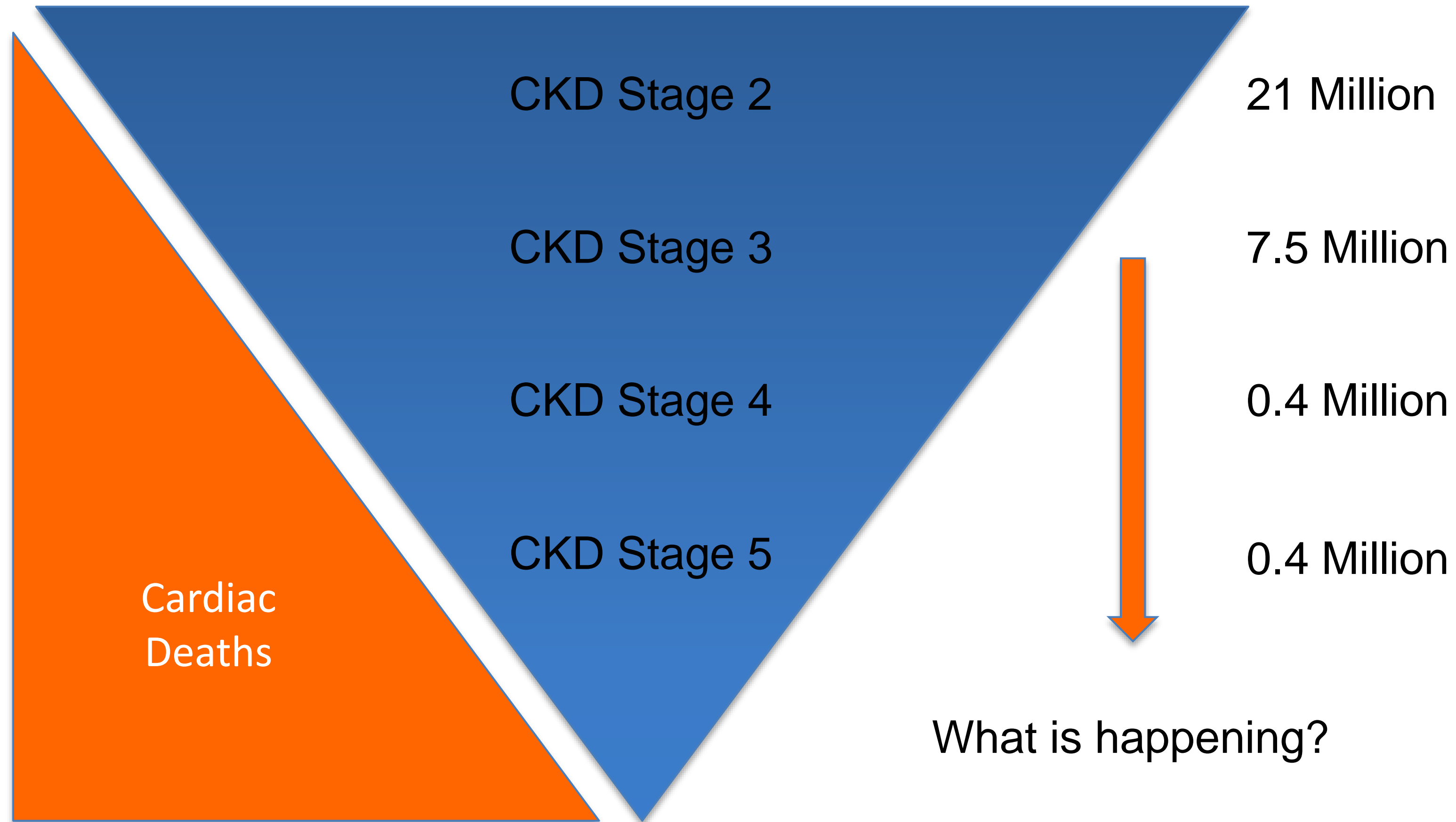
USRDS, 2010

CKD: Prevalence of Comorbids



USRDS, 2010

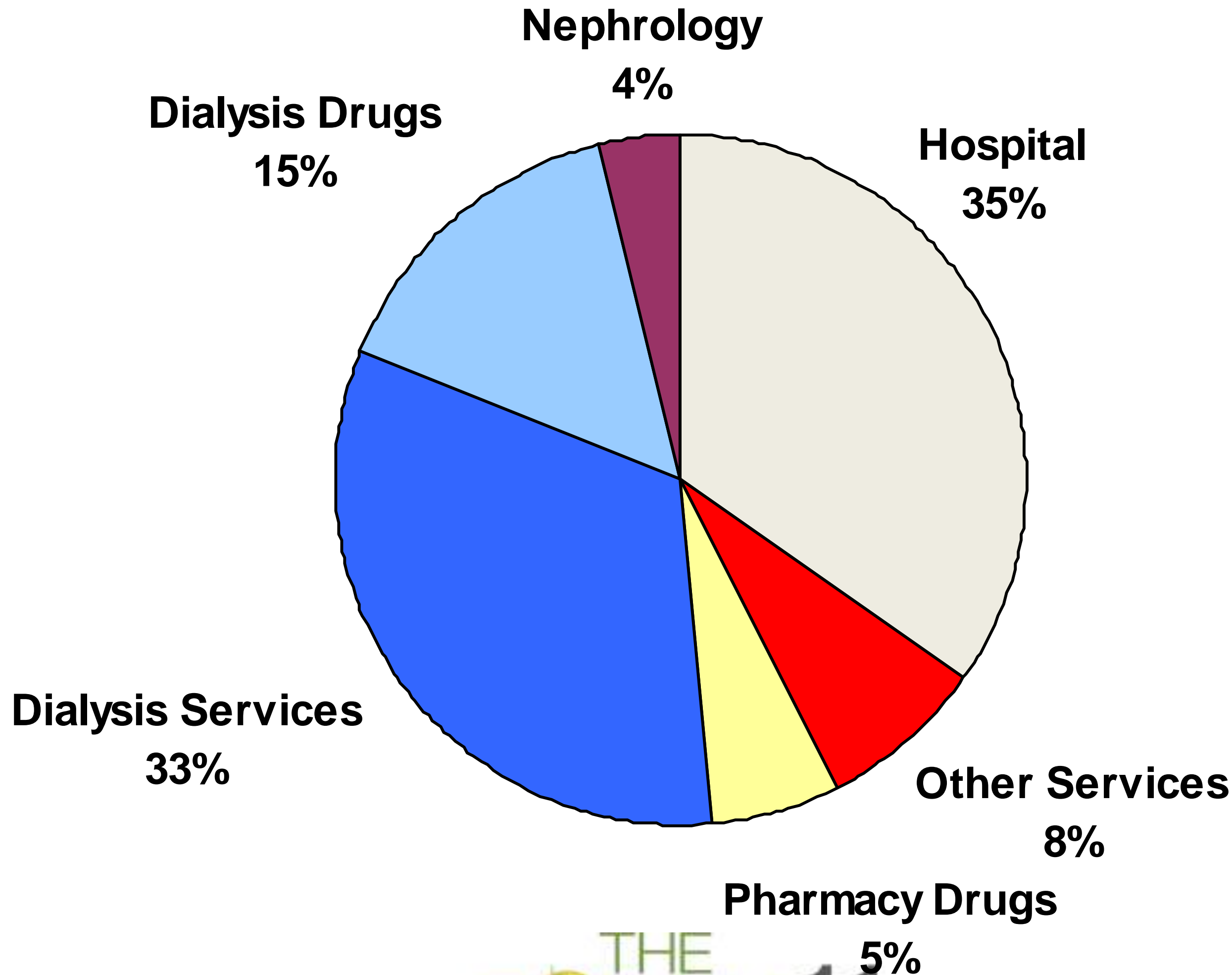
CKD: Prevalence



Payer: Costs

Annual Costs Per Dialysis Patient In A Commercial Health Plan

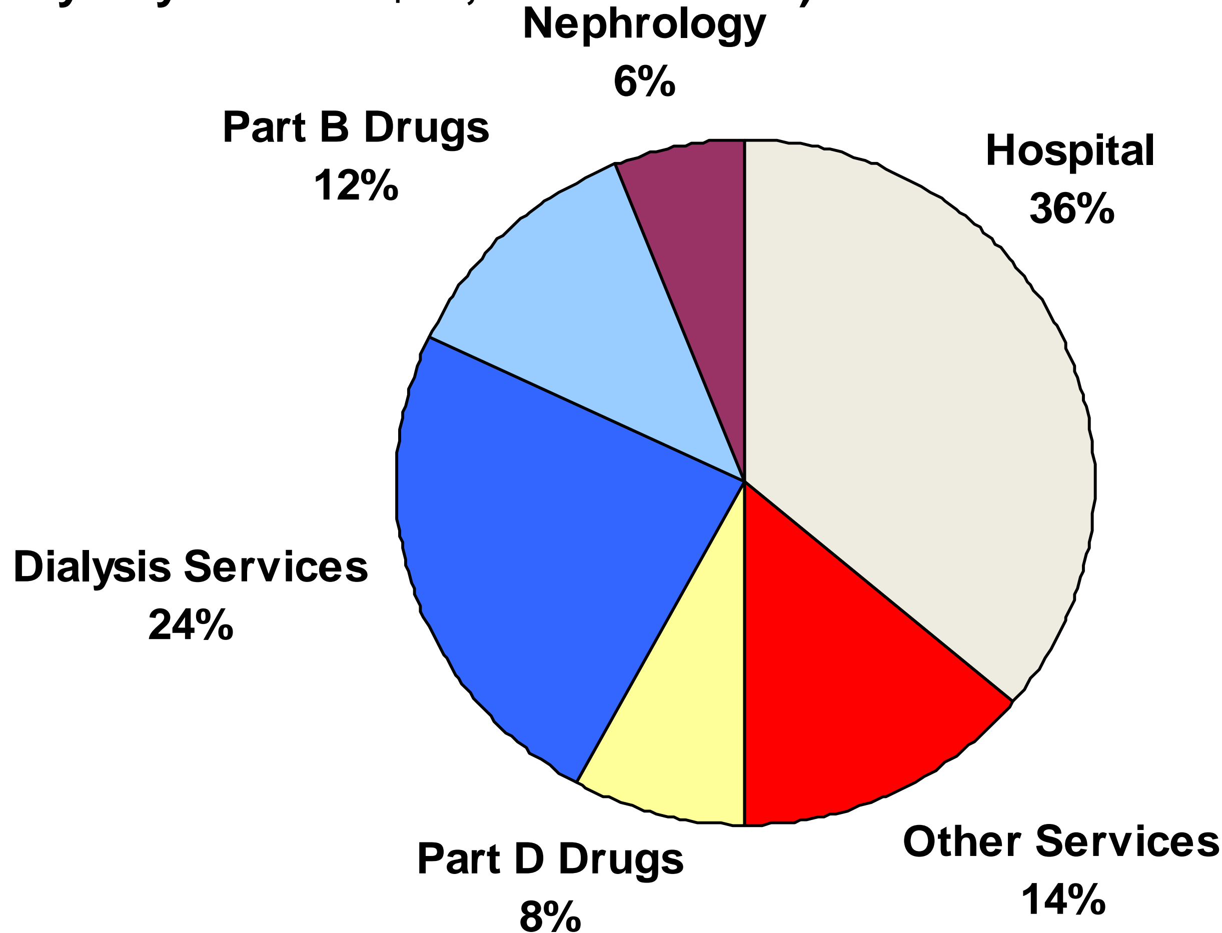
$150,000 to $200,000



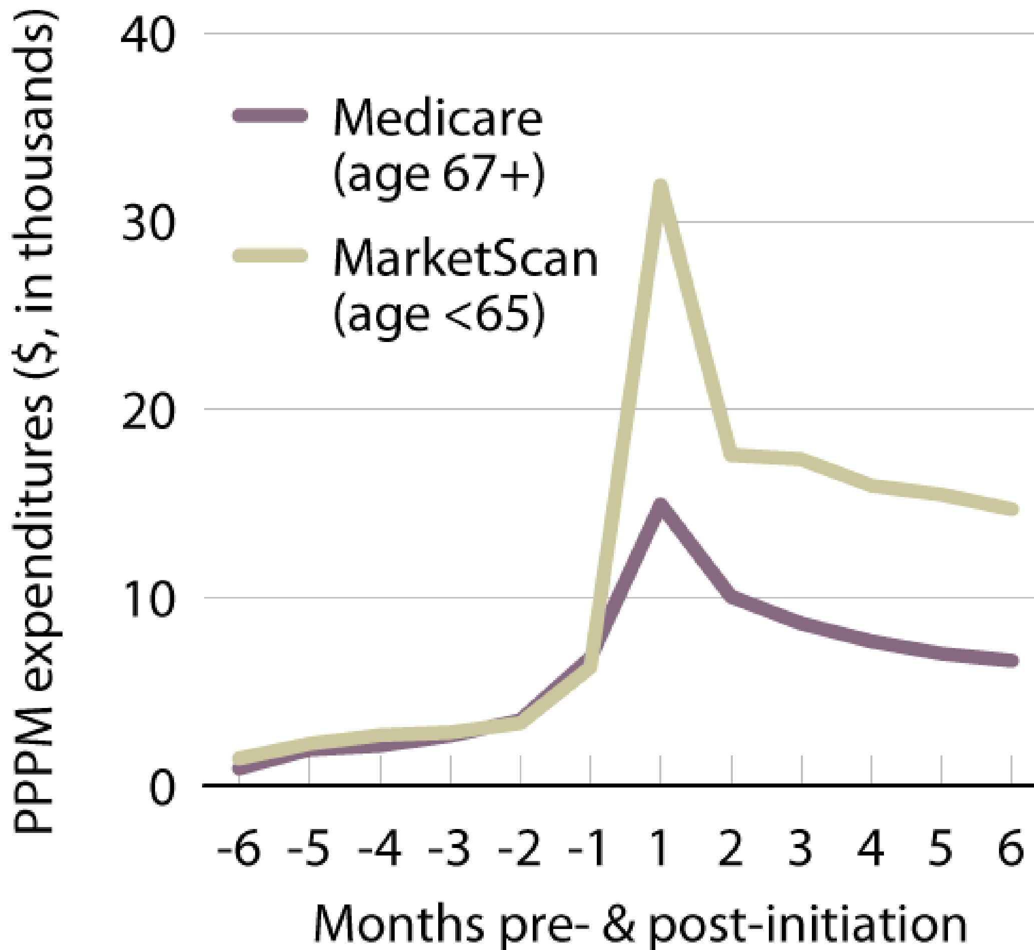
Payer: Costs

CMS Annual Costs Per ESRD Patient – $73,000

(Secondary Payer about $20,000 additional)

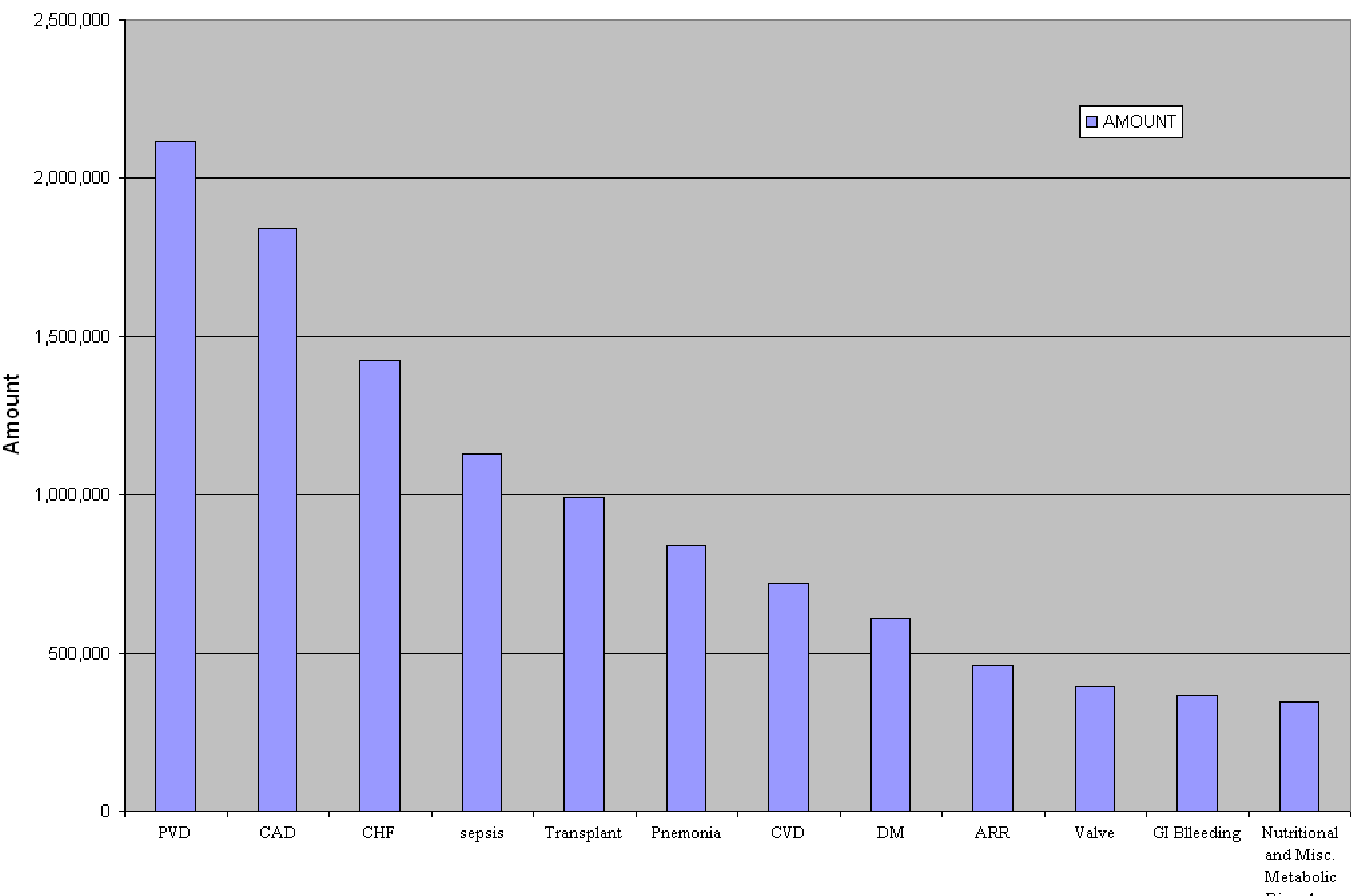


ESRD: Costs at Initiation



USRDS, 2010

Hospitalization Cost by Category for ESRD Patients
FHP Claims Cost Data



Provider Perspectives: CKD

Advanced CKD • GFR < 30ml/min • Stage 4-5

Primary Care Provider (Internist) – Office-buster

- Episodic, fragmented care as CKD progresses

Nephrologist – Principal Care Provider

- Office visit every 2 months
- Major medical issues
  - Treatment options, including EOL decisions
  - Vascular access or peritoneal catheter
  - Nutritional evaluation
  - Immunizations
  - Focus on comorbids that define the patient’s outcome
    - CAD, PVD, CHP, DM

Nephrologists

- Chronic Kidney Disease/Pre-dialysis
- End Stage Renal Disease/Dialysis
- End Stage Renal Disease/Transplant

- Continuous/Global Care, Not Episodic/Fragmented
- Established/Long-term relationship throughout continuum
- CKD → ESRD → Transplant → CKD → ESRD, etc

Provider Perspectives: ESRD

Nephrologists and ESRD Management

– Weekly Nephrologist visit = 48 visits/yr

– Thrice-weekly patient treatments = 156 visits/yr

– Monthly Comprehensive Assessment

– Coordinates ALL care: LCSW, RN, RD, Transplant, other specialists

– Medical Directorship of Dialysis Clinics:

  ~ QAPI, Care Plans, Staff training, Global outcomes

– Paid: FFS Medicare but on a capitated basis (MCP)

  - MedPAC currently only includes DIALYSIS care in MCP

Nephrologist *is* the PCP

- Nephrologists determine major care decisions from vaccinations to foot care.

- Dialysis morbidity/mortality and cost driven by:
  - » Cardiovascular/Peripheral Vascular disease
  - » Dialysis Adequacy
  - » Infection
  - » NOT: colonoscopy or PSA

- When used as the principle care giver and incentivized to deliver ESRD-oriented primary care, the Nephrologist eliminates redundancy and costs.

Patient: CKD and ESRD

- Who is helping me with the care decisions?
- Where do I turn?
- Who can help me and what services are available?
- Who can help me avoid that senseless cardiac death?

Renal Disease is like the Titanic

Defining Moment: Hitting the Iceberg

?Preventable

? Mitigable

?Time Course

"All the News That's Fit to Print."

The New York Times.

THE WEATHER.

TITANIC SINKS FOUR HOURS AFTER HITTING ICEBERG;
866 RESCUED BY CARPATHIA, PROBABLY 1250 PERISH;
ISMAY SAFE, MRS. ASTOR MAYBE, NOTED NAMES MISSING

Col. Astor and Bride, Isidor Straus and Wife, and Maj. Butt Aboard.

"RULE OF SEA" FOLLOWED

Women and Children Put Over in Lifeboats and Are Supposed to be Safe on Carpathia.

PICKED UP AFTER 8 HOURS

Vincent Astor Calls at White Star Office for News of His Father and Leaves Weeping.

FRANKLIN HOPEFUL ALL DAY

Manager of the Line Insisted Titanic Was Unsinkable Even After She Had Gone Down.

HEAD OF THE LINE ABOARD

Biggest Liner Plunges to the Bottom at 2:20 A. M.

RESCUERS THERE TOO LATE

Except to Pick Up the Few Hundreds Who Took to the Lifeboats.

WOMEN AND CHILDREN FIRST

Cunarder Carpathia Rushing to New York with the Survivors.

SEA SEARCH FOR OTHERS

The California Stands By on Chance of Picking Up Other Boats or Rafts.

OLYMPIC SENDS THE NEWS

The Lost Titanic Being Towed Out of Belfast Harbor.

PARTIAL LIST OF THE SAVED.

{Not the way Jack and Rose envisioned.}

CMS: ESRD Disease Management Demonstration Project

VALUE PROPOSITION

- Test impact of expanded integrated care
- Disease management – comorbids + dialysis
- Value = Quality/Cost

Fresenius created Fresenius Health Plan (MA plan) and invited several groups to participate.

- Quality Incentive Program
- PMPM payment
- Shared-savings model drove the alignment

Integrated Care Model Focus Areas

- **Prevent Hospitalization from CHF**
  - Home health monitoring technology (BP/weight/symptoms)
  - Trending of Clinic BP's, Weight, Dry Weight and Home Device data
  - Additional treatment / frequency as medically needed
- **Infection**
  - Immunizations
  - Dental exams
- **Vascular Access**
  - Fistula placement
  - Reduction in catheter use for permanent VA
  - Prompt access repair / intervention
- **Nutrition**
  - Oral supplements and Vitamins (albumin level driven)
- **Diabetes Care (and Peripheral Vascular Disease)**
  - Blood sugar monitoring
  - Eye exams
  - Wound management - reduction in foot ulcers and amputation
- **Education and Empowerment of Patient**
  - Labs, Patient Reports, Educational Materials

Results From Demonstration Project

The Fresenius Health Partners Program Achieved Statistically Significant (Case Mix Matched Adjusted) Improvement in the following:

- Mortality
- All Cause Hospitalization
- Cardiovascular Hospitalization
- Readmissions
- Skilled Nursing Facility Stays
- Physician Visits
- Overall Utilization of Services
- Overall Costs vs FFS Medicare

Results from Demonstration Project

Other Highlights from Demonstration Project Results:

- Daily Telehealth Monitoring Impact on Outcomes Favorable
- Nutrition supplements Impact (lower hospitalization with increased albumin)
- Quality Improvement Targets → Achieved over 90% of CMS defined clinical improvement targets

Other Positive Outcomes:

- Improved coordination with Nephrology Practice Groups
- Provision of additional benefits, resources and care coordination for patients otherwise unavailable to them in FFS Medicare / Medicaid
- Strong Patient Satisfaction

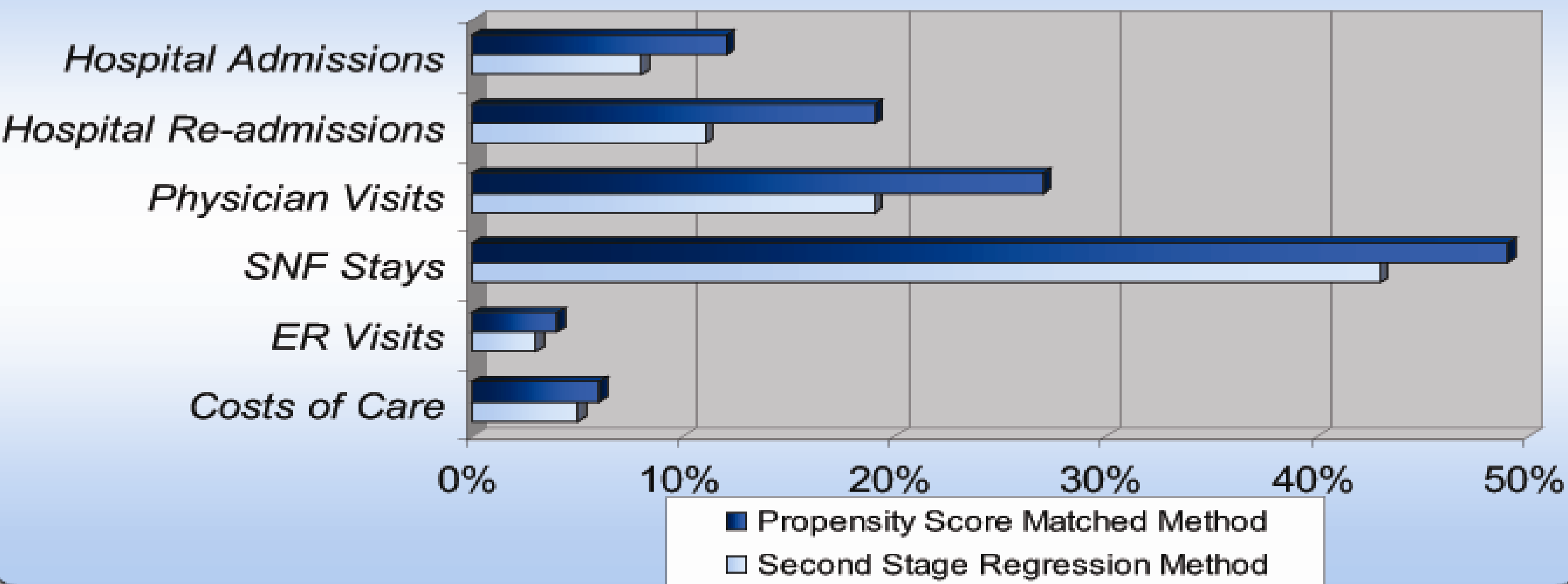
Results from Demonstration Project

Improved Survival, Reduced Hospitalization, Lowered Cost

	Fresenius Medical Care	Medicare FFS (Case Mix Adjusted)	% FHP Improvement
Adjusted 1 YR Mortality	9.3%	14.6%	36%
Adjusted 2 YR Mortality	19.9%	26.1%	24%
Pts Hospitalized All Cause 2 YRS	60.5%	76.1%	20%
Pts Hospitalized CV Disease 2 YRS	59.7%	75.2%	21%

Results from Demonstration Project

Improved Survival, Reduced Hospitalization, Lowered Cost



How Did We Do It?

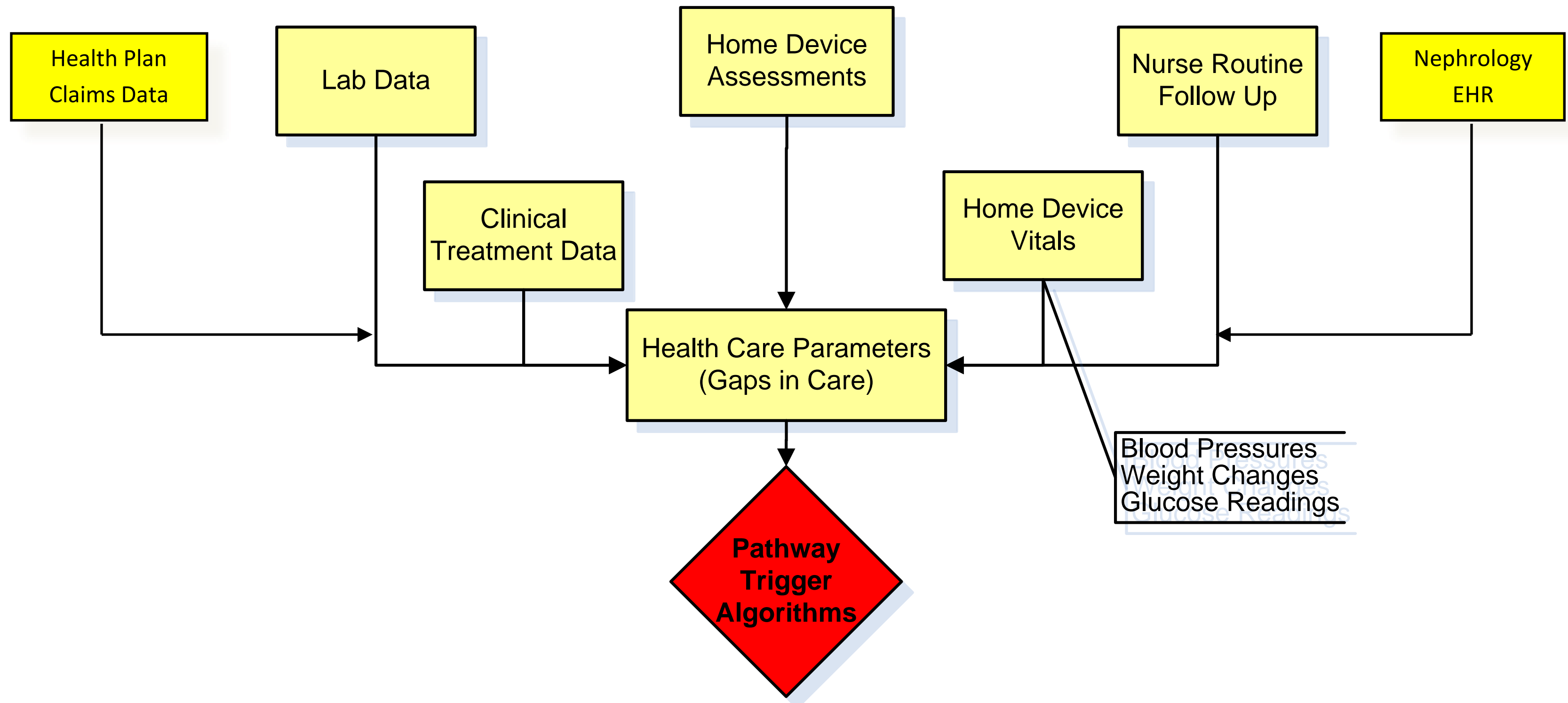
- **KidneyTel Remote Health Status Monitoring:**
  - Home BP
  - Patient specific health questions with daily interactions with RN care managers
  - Interdialytic weight gain
  - Blood glucose
  - Additional data source for care plan pathway triggers
- **Dedicated KidneyTel Nurses**
- **Renal Vitamins**
- **Oral Nutritional Supplements**
- **Diabetic testing supplies shipped to home, no out-of-pocket expense**

KidneyTel ICM Platform

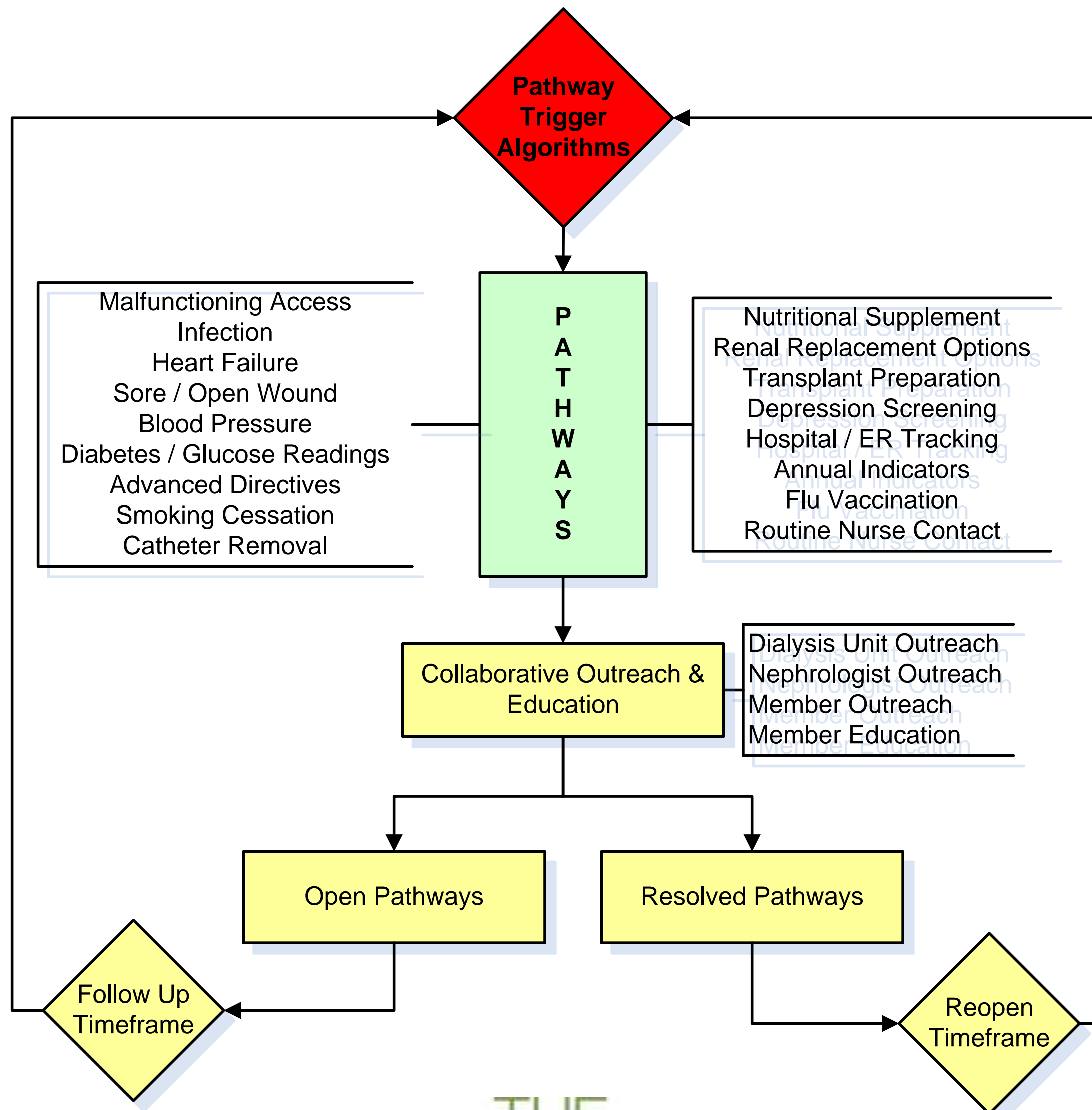
KidneyTel ICM Platform

- TeleHealth Communication Devices for Daily Contact and Home Health Monitoring
- Personal Nurse Care Manager
- Nutritional Supplements Program Available to Members
- Educating and Empowering the Patient
- Management of Co-morbidities (beyond dialysis)
- Advocacy and Support for Home Dialysis Options

Pathway Sources



KidneyTel ICM Platform



What does a CKD/ESRD Medical Home Look Like?

Nephrologist as Principle Care Provider

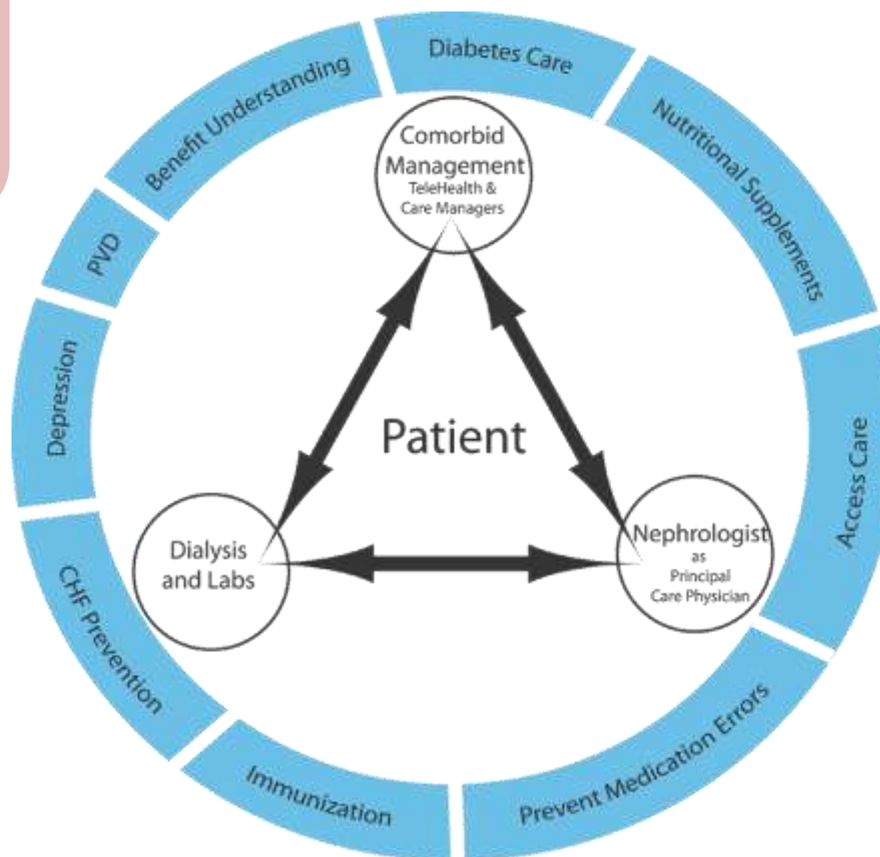
- –Incentivized to provide CKD-oriented primary care

CKD-oriented Integrated Care Management

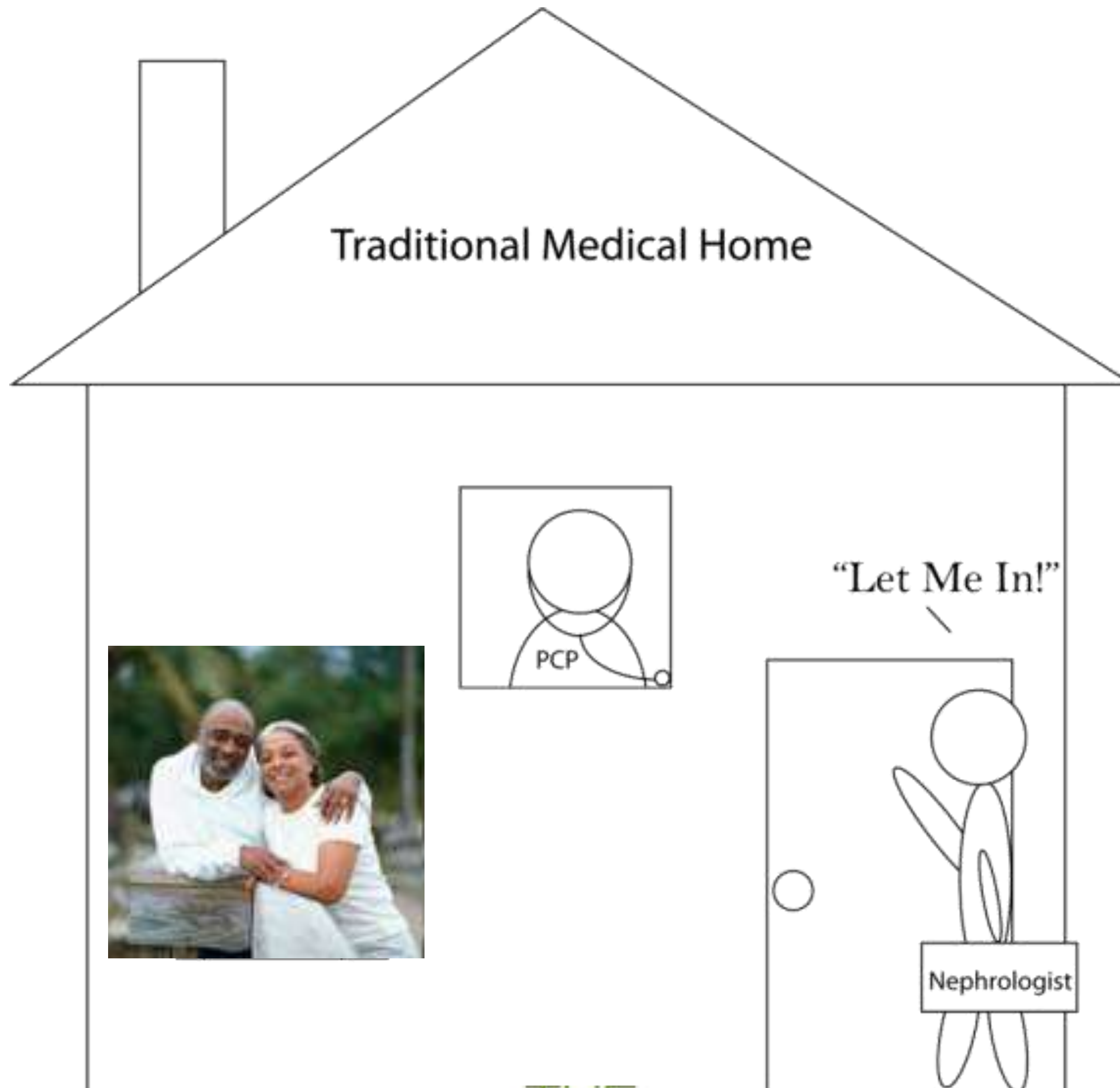
- –Focus on high-impact areas
  - »Before initiation
  - »During transition
  - »After initiation
- –Integrated with Dialysis Clinic and Nephrology Practice
- –Ongoing, interactive care – not episodic
- –Accredited

What does a CKD/ESRD Medical Home Look Like – TO THE PATIENT?

"They give me the care I need and want when I need and want it."



Traditional Medical Home



CKD/ESRD Medical Home

FHP Integrated Care Management Program