ESRD Basics

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Milliman

The Basics

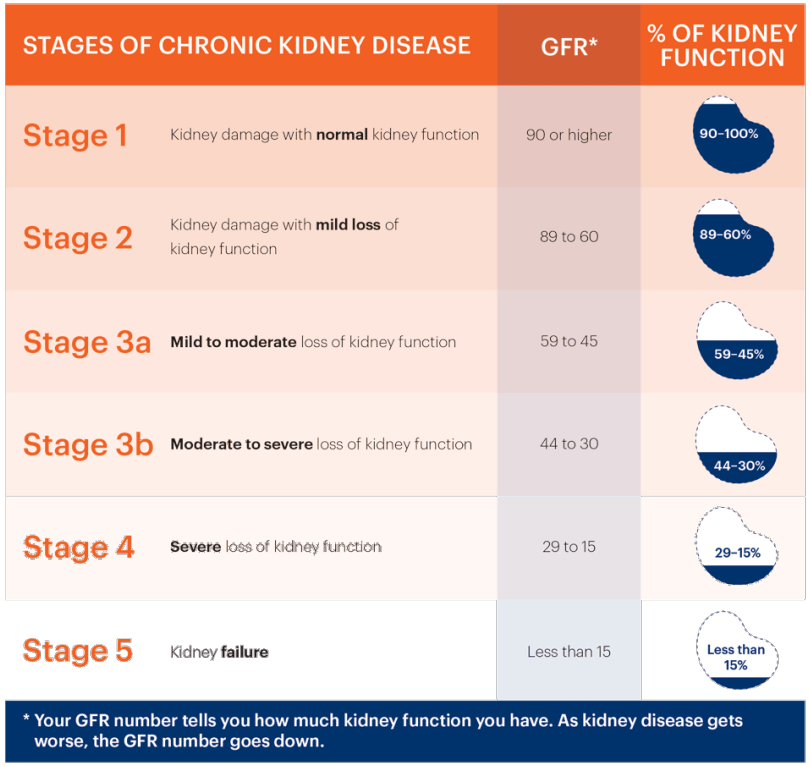
- What does the kidney do?

- The five stages of CKD (Chronic Kidney Disease)

*GFR: Estimated Glomerular Filtration Rate

- **Stage 5: ESRD (End State Renal Disease)**

A medical condition where a person's kidneys cease functioning on a permanent basis leading to the need for a regular course of long-term dialysis or a kidney transplant to maintain life.



Source: National Kidney Foundation

What happens after you get ESRD?

- **Treatments include:**
  - Transplant
  - Dialysis
- **Dialysis Modalities:**
  - **Based on technology:**
    - **Hemodialysis** uses a special filter (called a dialyzer) to clean your blood. The filter connects to a machine.
    - **Peritoneal dialysis** (PD) uses a special solution (called dialysate) that flows through a tube into your abdomen. After a few hours, the dialysate takes wastes from your blood and can be drained from your abdomen.
  - **Based on location/time:**
    - In-center dialysis (3-4 times a week, 3-4 hours each time)
    - Home dialysis (5-6 times a week, 2-3 hours each time)
    - Nocturnal dialysis (6-8 hours during the night)
- Often have comorbidities and present complex clinical and social needs

Enrollment in Original Medicare (Before 2021)

- You can enroll in ESRD Medicare regardless of age if:
  - Your kidneys no longer work, and
  - You need regular dialysis or have had a kidney transplant, and
  - Satisfy certain requirements for Social Security or the Railroad Retirement benefits

- If you develop ESRD while on age or disability Medicare, you do not have to enroll in ESRD Medicare, but may still want to since:
  - ESRD Medicare can be retroactive up to a year and give you an earlier Medicare start date
  - Enrolling in ESRD Medicare waives your Part B LEP

Enrollment in Medicare Advantage (Before 2021)

- Typically cannot enroll in a MA plan if you are eligible for ESRD Medicare, with a few exceptions, including:
  - Developed ESRD while enrolled in an MA plan
  - A SNP plan specifically serving ESRD individuals
  - Grandfathered through employer-sponsored coverage
- Payments to MA for ESRD patients are set at the state level (not county).
- ESRD risk adjustment for MA plans uses a separate model.

ESRD Population and Spending

FFS Medicare (2016 study)

- Less than 1% of Medicare beneficiaries had ESRD
- Services for these patients accounted for 7.2% of Medicare costs.
- $60,000 - $80,000 annually per ESRD beneficiary. 4 times more than the average disabled beneficiary and 6 times more than the average aged beneficiary.

Medicare Advantage

- About 0.65% of MA beneficiaries has ESRD
- Services for these patients accounted for about 5% of total MA plan spend.
- 21st Century Cures Act (Cures Act) effective 2021: CMS estimates additional 83,000 ESRD MA enrollees by 2026 (63% increase).

Potential Ways to Manage the ESRD Cost

- Shift dialysis into home setting (with education and training for members)
- Increase plans' flexibility to manage dialysis provider networks and improve contractual terms
- Kidney disease prevention and case management to slow disease progression
- Manage comorbidity
- Conservative Kidney Management (CKM) - Palliative Care
  - Some members may choose not to go through dialysis or get a kidney transplant and instead seek supportive care and treatment

ESRD and Medicare Advantage

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June 8, 2020

Humana®

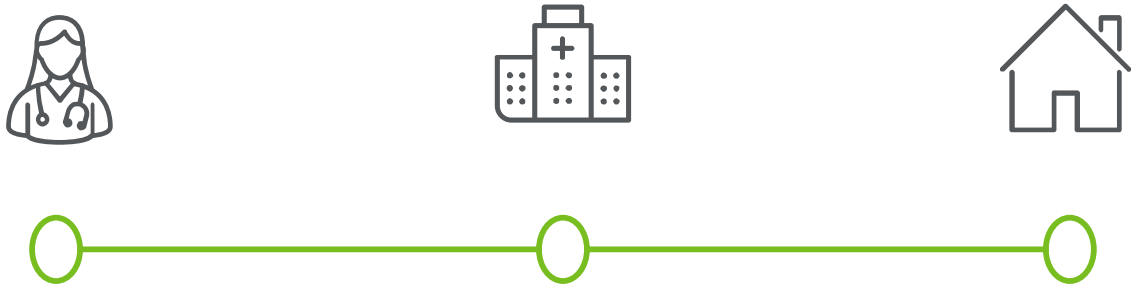
21st Century Cures Act

- Prior to 2021, those with end-stage renal disease (ESRD) could only enroll in a Medicare Advantage (MA) plan prior to developing ESRD, by enrolling in a ESRD SNP, or by developing ESRD while on a commercial plan and then selecting a MA plan with the same carrier. There were also limited situations where a member could move between Medicare Advantage plans.

- The 21st Century Cures Act is removing these restrictions, allowing those with ESRD to enroll in MA plans in the same way the Medicare Eligibles without ESRD can enroll in MA plans

- These changes could result in Medicare Advantage Organizations (MAOs) acquiring some (or "certain") ESRD beneficiaries currently enrolled in Original Medicare
  - Current MA penetration rates for Medicare enrollees with ESRD are much lower than MA penetration rates for those without ESRD and many have been barred from entry.
  - MA plans offer certain benefits that original Medicare does not (e.g. maximum out of pocket, transportation) that could be very attractive to the member

What Each ESRD Status Represents



Dialysis

Those receiving dialysis treatment on a regular, ongoing basis in an outpatient setting

Transplant

Graft 1 – The month of the transplant

Graft 2 – Months 2 and 3 after the transplant

Post-Graft

Post-Graft 1 – Months 4-9 after the transplant

Post-Graft 2 – Months 10-36 after the transplant

MAO Capitation Models from CMS

Dialysis

- State adjusted benchmark payment (Based on $8,110 PMPM average FFS USPCC for CY 2021 [1]).
- *Payment = Benchmark * risk score* (dialysis model)
- Bid and rebate dynamics do not apply
- No payment modification for higher stars scores

Transplant

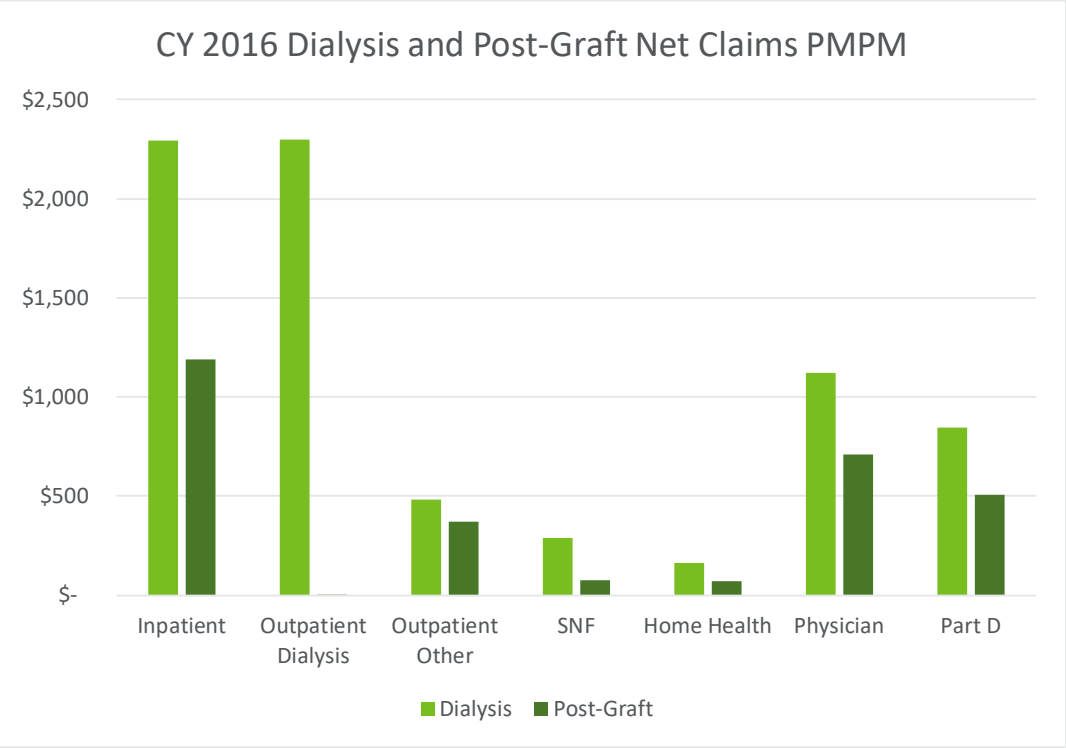
- State adjusted benchmark payment used for non ESRD population (Based on $8,110 PMPM average FFS USPCC for CY 2021 [1]).
- *Payment = Benchmark * risk score* (transplant)
- Transplant risk score is ~6 for month 1 and ~0.9 for months 2-3
- Bid and rebate dynamics do not apply
- No payment modification for higher stars scores

Post Graft

- County level benchmark payment used for non ESRD population (Based on $975 PMPM average FFS USPCC for CY 2021 [1]).
- *Payment = Benchmark * risk score* (functioning graft model)
- Bid and rebate dynamics do not apply
- Stars score modifies benchmark payment

Source: [1] https://www.cms.gov/medicarehealth-plansmedicareadvtgspecratestatsannouncements-and-documents/2021-0

Distribution of Medical Cost for ESRD Patients



- Dialysis beneficiaries have substantially higher costs than Post-Graft beneficiaries.
  - The cost differential is most pronounced in IP and OP dialysis.
- In total, Dialysis beneficiaries in Original Medicare had PMPM costs of $7,496 vs. $2,922 in 2016 for Post-Graft OM beneficiaries.

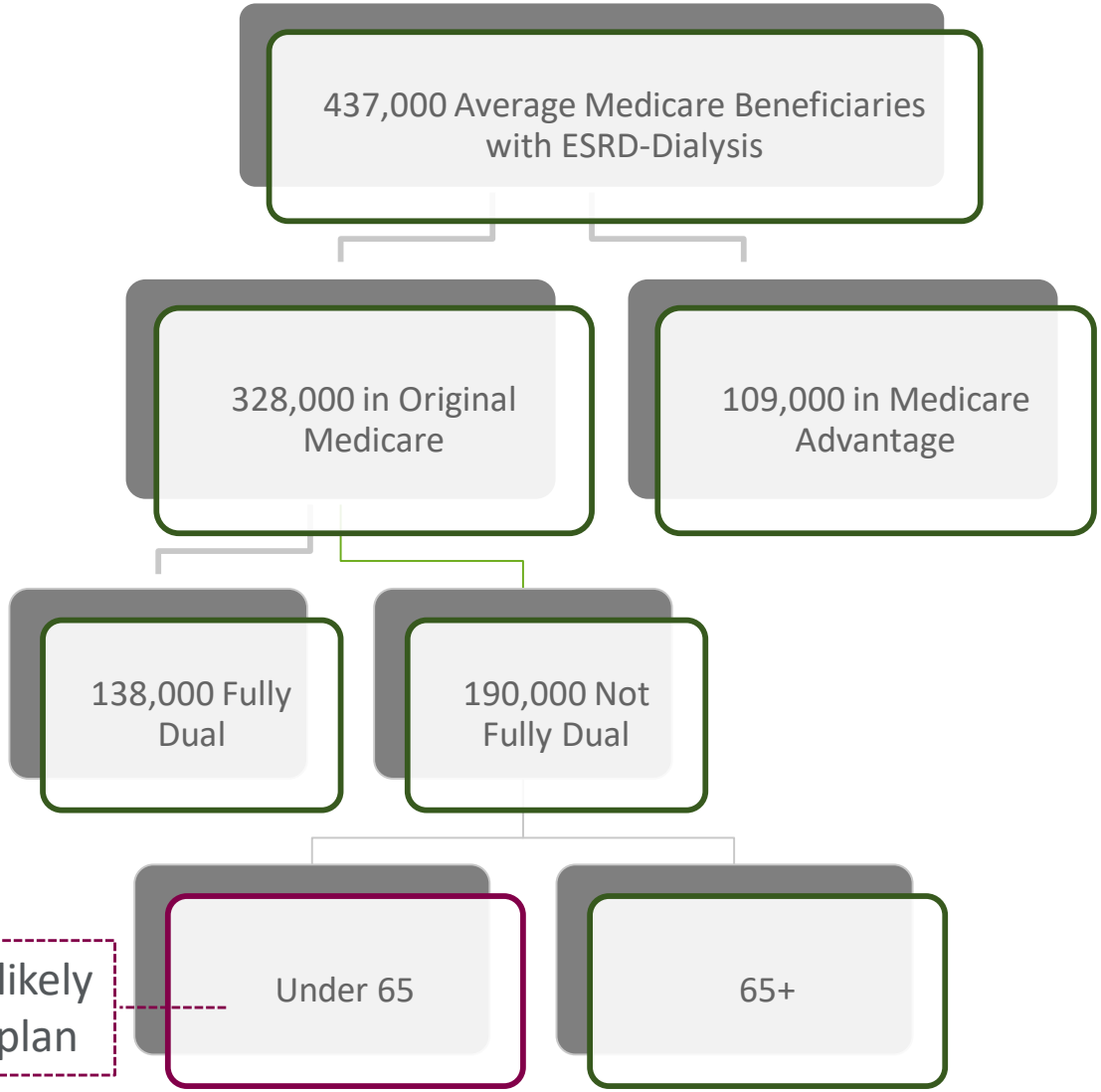
Source: USRDS 2019 Table K.a, https://www.usrds.org/reference.aspx

ESRD Incremental model – Incentives

	Over Age 65	Under Age 65
Full Dual	• Some incentive to move due to supplemental benefits • MOOP is not an issue	• Some incentive to move due to supplemental benefits (transportation) • MOOP is not an issue
Non Full Dual	• Some incentive to join due to MOOP • Members may have a Medicare Supplemental plan if offered in the state; incentive to move if MOOP is lower than the premium	• Large incentive to join MA plan due to MOOP • Limited Medicare Supplemental plan availability (may not be offered, or may be rated up and very uncompetitive)

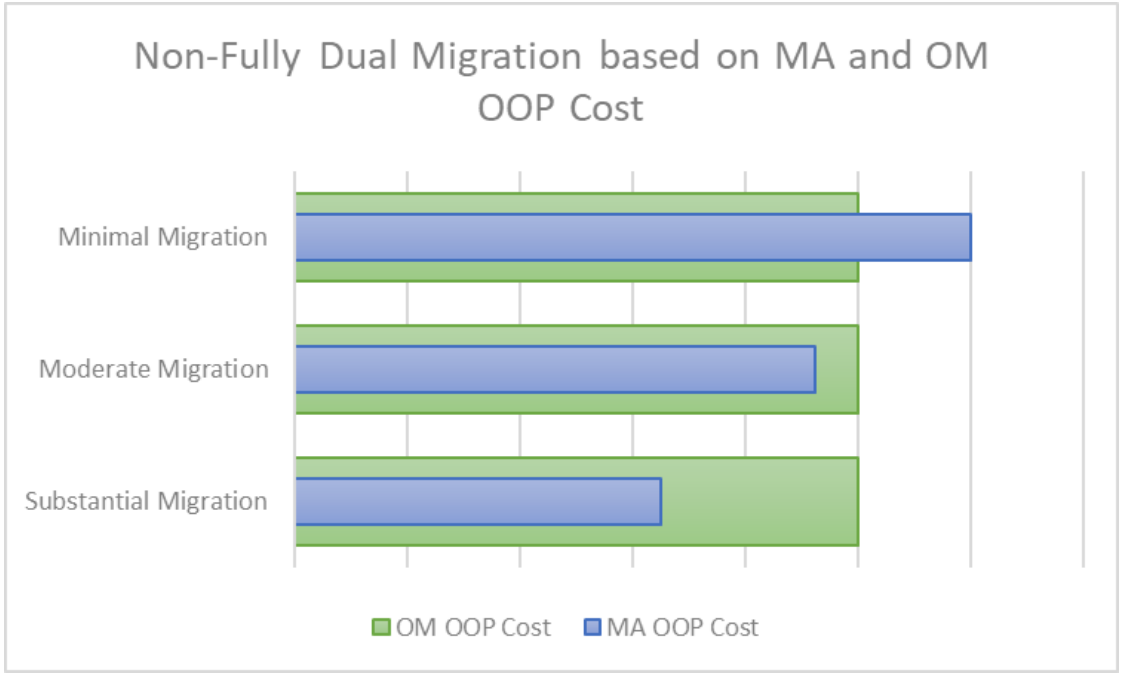
Medicare Eligible ESRD-Dialysis Membership by Cohort

Source: BofA Global Research



Estimating OM Dialysis Migration into MA Plans

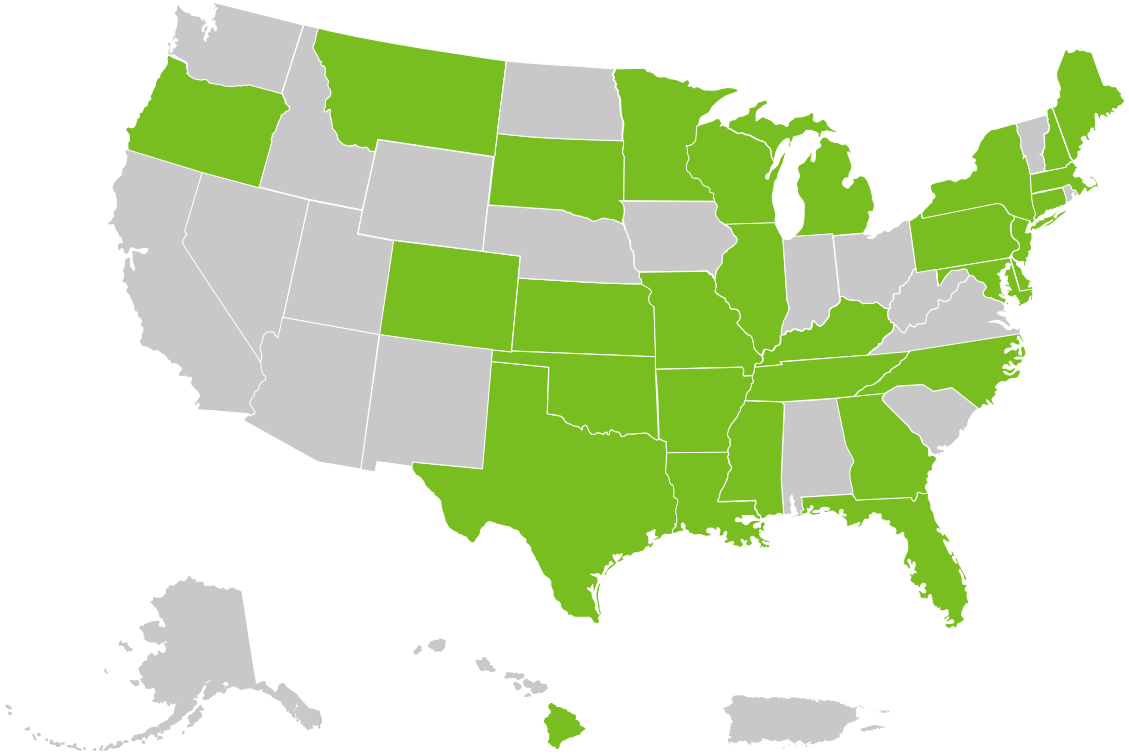
- For non-fully dual Medicare beneficiaries, OOP cost savings could be the primary driver of migration into Medicare Advantage
  - OOP Cost can be estimated as:
    - OM: Plan F Medicare Supplement Premiums (if available)
    - MA: MOOP + MA Member Premium – Part B Giveback



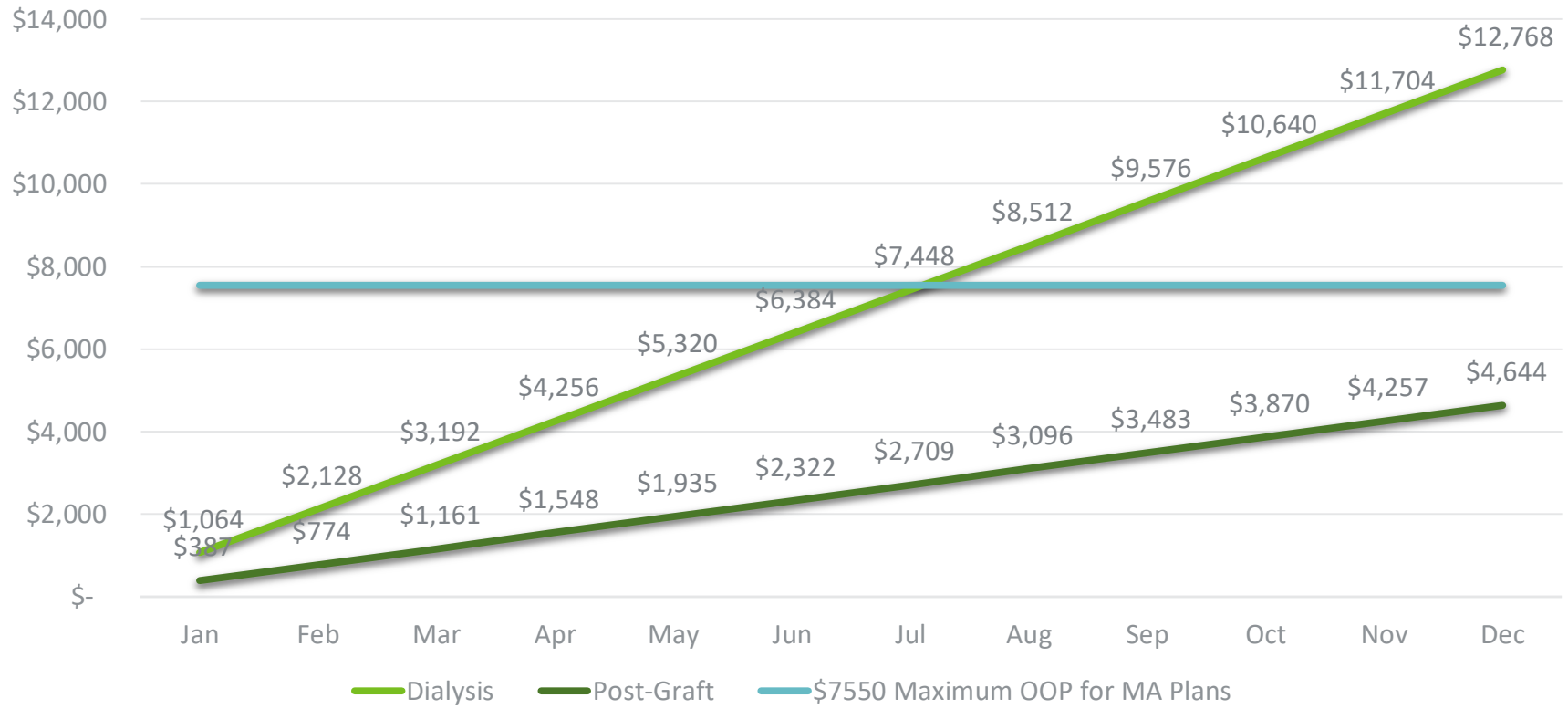
- For fully dual Medicare beneficiaries, additional benefits like covered transportation could be the primary driver of MA migration

Medicare Supplement For ESRD Beneficiaries Under 65

Medicare Supplement is not available for Medicare Eligibles Under 65 with ESRD in 20 States (Grey)



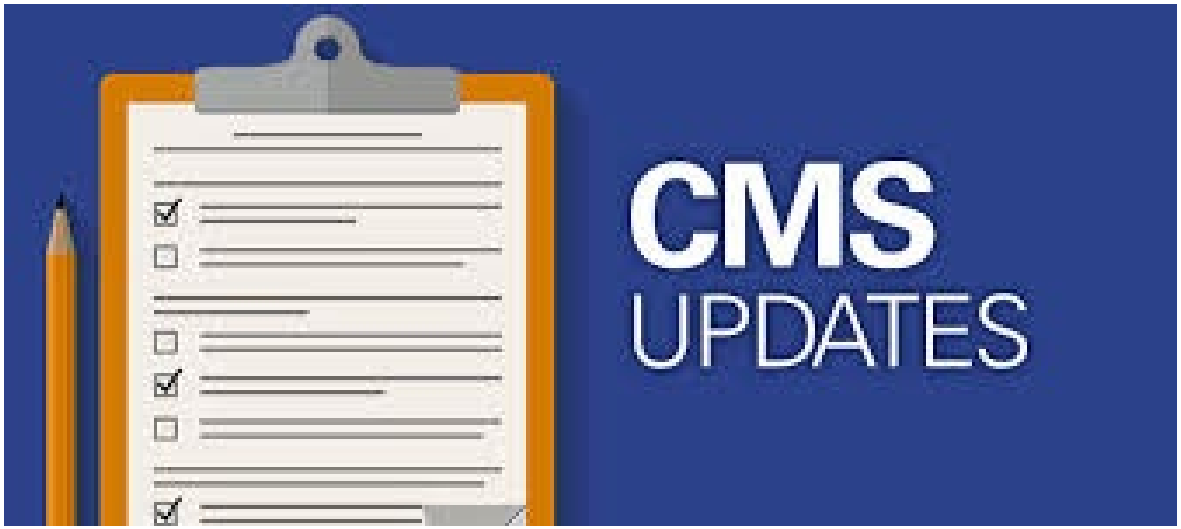
Out of Pocket Costs for ESRD Members for CY 2018



- Dialysis beneficiaries have significant out of pocket costs of $1,064 per month while post graft beneficiaries have OOP costs of $387 per month. A dialysis beneficiary should expect to hit the maximum out of pocket of any Medicare Advantage plan due to consistent dialysis treatment.
- The average dialysis patient currently on Original Medicare would save a minimum of $5,218 per year by switching to Medicare Advantage due to the presence of a OOP maximum.

Source: 2019 USRDS + ESRD SNP BPT Cost Sharing Factors

CMS ESRD Regulatory Changes for 2021



- CMS increased the maximum MOOP MA plans can offer from $6,700 to $7,550, recognizing that ESRD will represent a higher proportion of MA membership in 2021
- CMS increased TBC
- CMS has relaxed the current time and distance network adequacy standards for dialysis providers, allowing MAOs to attest to having an adequate dialysis network.
- However, CMS did not increase benchmarks to recognize the impact of the Maximum out of Pocket benefit on MA claims expense.

ESRD Implications for 2021 MA Bids

For the 2021 bid cycle no changes were made to how ESRD is handled in the bid pricing tool

The current MA Bid Pricing Tool (BPT) excludes ESRD experience from the benchmark, bid, and ultimately projected gain/loss margin unless the ESRD subsidy box is filled out. This creates the following implications:

- The ESRD experience will not be included in any of the margin tests (unless using the ESRD subsidy box)
- Use of the ESRD subsidy box causes an increase to member's premium or requires additional rebate dollars to buy down the members premium
- MAO payment from CMS for ESRD members currently uses the benchmark which is greater than or equal to if they were paid off bid + rebate

ESRD BPT Approaches CMS May Consider in the Future

Include ESRD experience in the BPT benchmarks/bid

Option 1:

- Add a box that allows the ESRD projection to be blended with the aggregate margin or by incorporating extra worksheets from the ESRD SNP BPT.

Pros:

- The projections in the BPTs would be a more accurate depiction of the MAO's financials

Cons:

- Multiple worksheets in the MA BPT would need added granularity similar to how DE# is shown.
- Would require large scale change to the community, dialysis, transplant, and graft risk score models
- ESRD payments could decrease overall
- ESRD MOOP impacts(among other items) would become added benefits that would have to be bought down with rebate dollars.

Include ESRD experience in the BPT gain/loss margin after bid/rebate calculations

Option 2:

- Input the ESRD projection through a box that gets blended with the aggregate margin or by incorporating worksheets from the ESRD SNP BPT.

Pros:

- The projections in the BPTs would be a more accurate depiction of the MAO's financials
- Would not require a payment/risk score change overhaul

Cons:

- Adds complexity to the BPTs

Exclude ESRD experience in the BPT and separately submit projections

Option 3

- Provide an ESRD projection for all plans within the MA BPT substantiation packet

Pros:

- Simplest to implement
- Would require no change to the BPT

Cons:

- The BPT would not be the most accurate representation of the MAO's financial picture
- The aggregate margin from the BPT would not include ESRD experience

ESRD and Part D

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Part D ESRD

- Most ESRD spend is in Part B, but significant cost in Part D
- ESRD members included in Part D bid
- ESRD members actively enroll in PDPs
- Significant differences in risk score and claims cost
- Important to understand rebates

Part D ESRD

Distribution of ESRD Member 2018 Drug Spend

Top 8 Part D Drugs Associated with Treating ESRD by Allowed PMPM Difference, ESRD vs Non-ESRD Cohorts
CY2018 Experience

Member Summary	PDP Percent of Total	PDP Risk Score	PDP Allowed PMPM	MAPD Percent of Total	MAPD Risk Score	MAPD Allowed PMPM
ESRD	1.8%	2.44	$784.77	0.5%	2.27	$615.74
Non-ESRD	98.2%	1.04	373.44	99.5%	0.97	238.78

	PDP Allowed PMPM			MAPD Allowed PMPM		
Top Drugs by Allowed Cost	ESRD	Non-ESRD	Difference	ESRD	Non-ESRD	Difference
SEVELAMER CARBONATE (RENVELA TABLETS)	$106.91	$0.06	$106.84	$63.50	$0.03	$63.47
RENVELA TABLETS	72.78	0.04	72.74	34.34	0.02	34.32
VELPHORO	32.49	0.01	32.48	16.69	0.00	16.68
SENSIPAR	22.40	0.34	22.06	22.25	0.24	22.01
AURYXIA	22.25	0.02	22.24	13.27	0.01	13.26
CALCIUM ACETATE	11.30	0.02	11.29	8.29	0.01	8.28
LANTHANUM CARBONATE	8.37	0.00	8.37	7.73	0.00	7.73
SEVELAMER CARBONATE (RENVELA PAK)	8.24	0.01	8.23	6.14	0.00	6.14

Summarized using Milliman's consolidated Part D dataset, risk scores based on 2019 MMR data

Part D ESRD

2020 Member Weighted Formulary Placement

	PDP Tiers						MAPD Tiers					
Drug Name	**1**	**2**	**3**	**4**	**5**	**NC**	**1**	**2**	**3**	**4**	**5**	**NC**
SEVE. CARBONATE (RENVELA TABLETS)	0%	1%	25%	51%	0%	23%	0%	21%	30%	49%	0%	0%
RENVELA TABLETS	0%	0%	47%	0%	0%	53%	0%	0%	22%	0%	4%	74%
VELPHORO	0%	0%	0%	7%	1%	92%	0%	0%	0%	2%	14%	84%
SENSIPAR	0%	0%	0%	24%	2%	75%	0%	0%	2%	3%	40%	55%
AURYXIA	0%	0%	0%	81%	15%	4%	0%	0%	0%	25%	59%	16%
CALCIUM ACETATE	3%	9%	89%	0%	0%	0%	1%	43%	55%	0%	0%	0%
LANTHANUM CARBONATE	0%	0%	0%	11%	3%	86%	0%	13%	2%	1%	39%	45%
SEVE. CARBONATE (RENVELA PAK)	0%	0%	20%	28%	28%	23%	0%	9%	30%	3%	55%	2%

Summarized using 2020 CMS formulary files

Part D ESRD

Medicare Plan Finder

- Prospective members enter drugs they use, plans with lowest drug cost sorted to the top
- Non-covered drugs show full cost
- Sensipar included on plan finder

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Thank you