

Risk Adjustment in a Value-Based World

Presented By:

Jamie McCarthy, *Principal Strategy Consultant* – **3M HIS**

Megan Clark, *Reporting and Analytics Manager* – **3M HIS**





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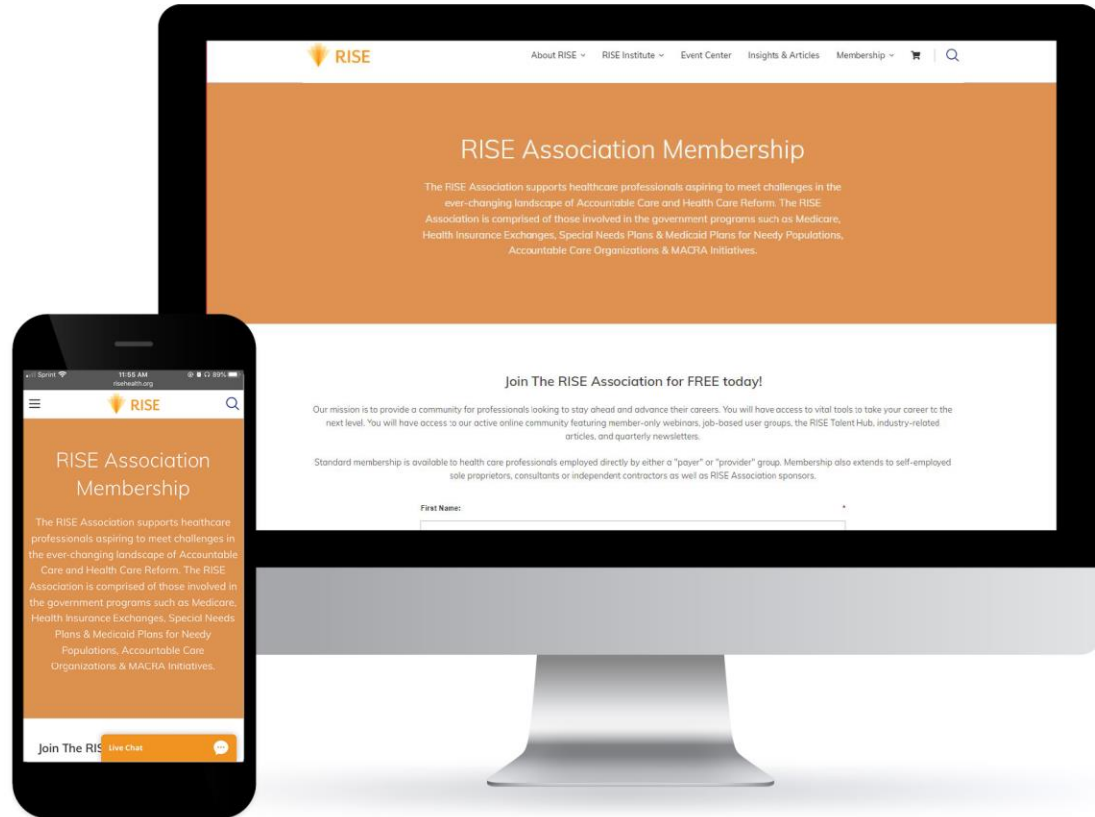
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Agenda

- Shift from volume to value
- Importance of risk adjustment
- Value-based performance measurement
- Adding insight into clinical workflows
- Integrating social risk
- Engaging specialists in value-based care



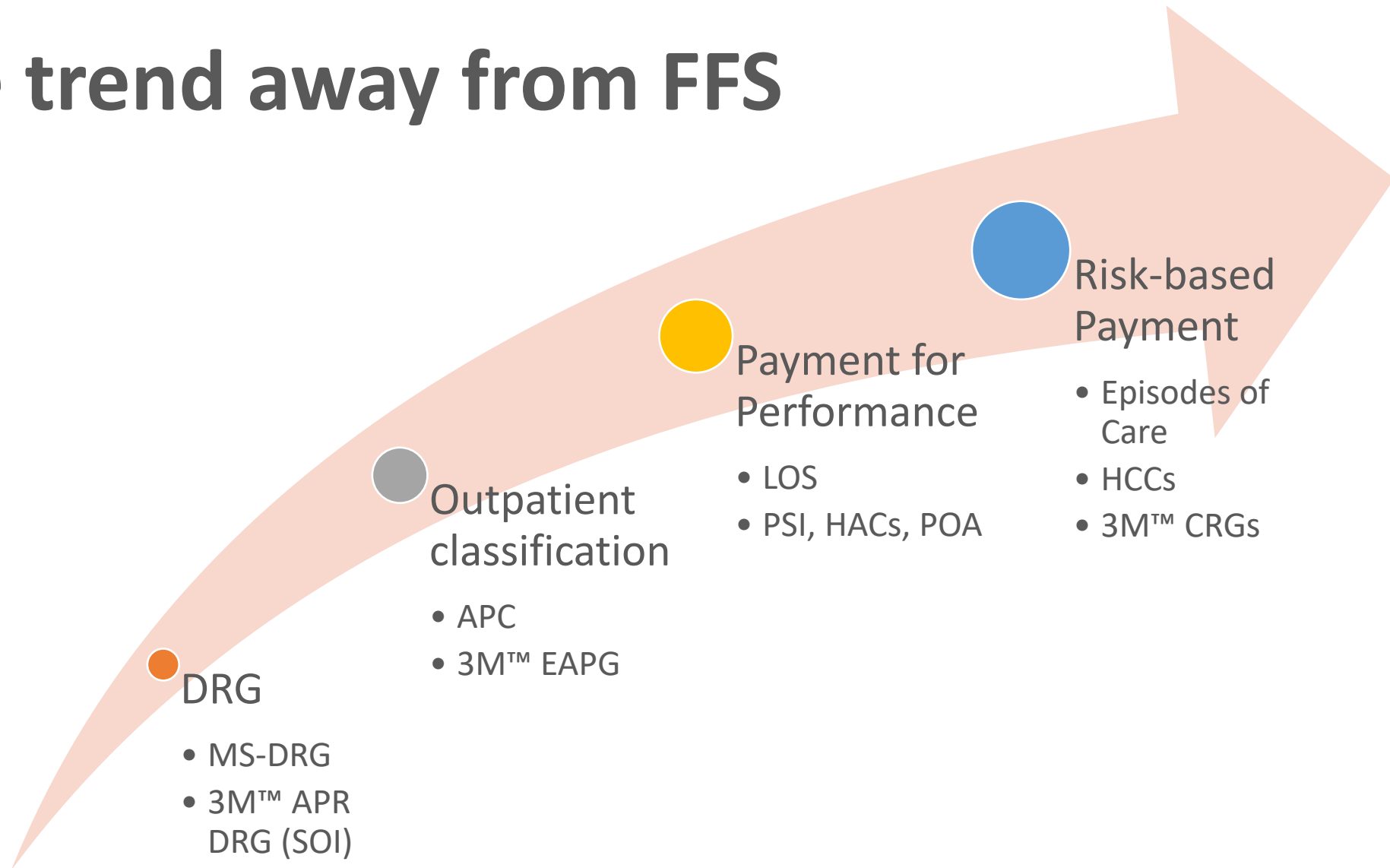
The shift from volume to value

Value-based care: An alternative to FFS

	Volume - Based		Value - Based
Payment	FFS	➔	Global Payments
Incentives	Do more	➔	Appropriateness
Focus	Events	➔	Populations
Care Teams	Conditions	➔	Person
Approach	Autonomous	➔	Collaborative
Accountability	Limited	➔	Shared
Quality	Process Measures	➔	Outcomes



The trend away from FFS



Accelerating change in value-based payment

Change in Operational Model

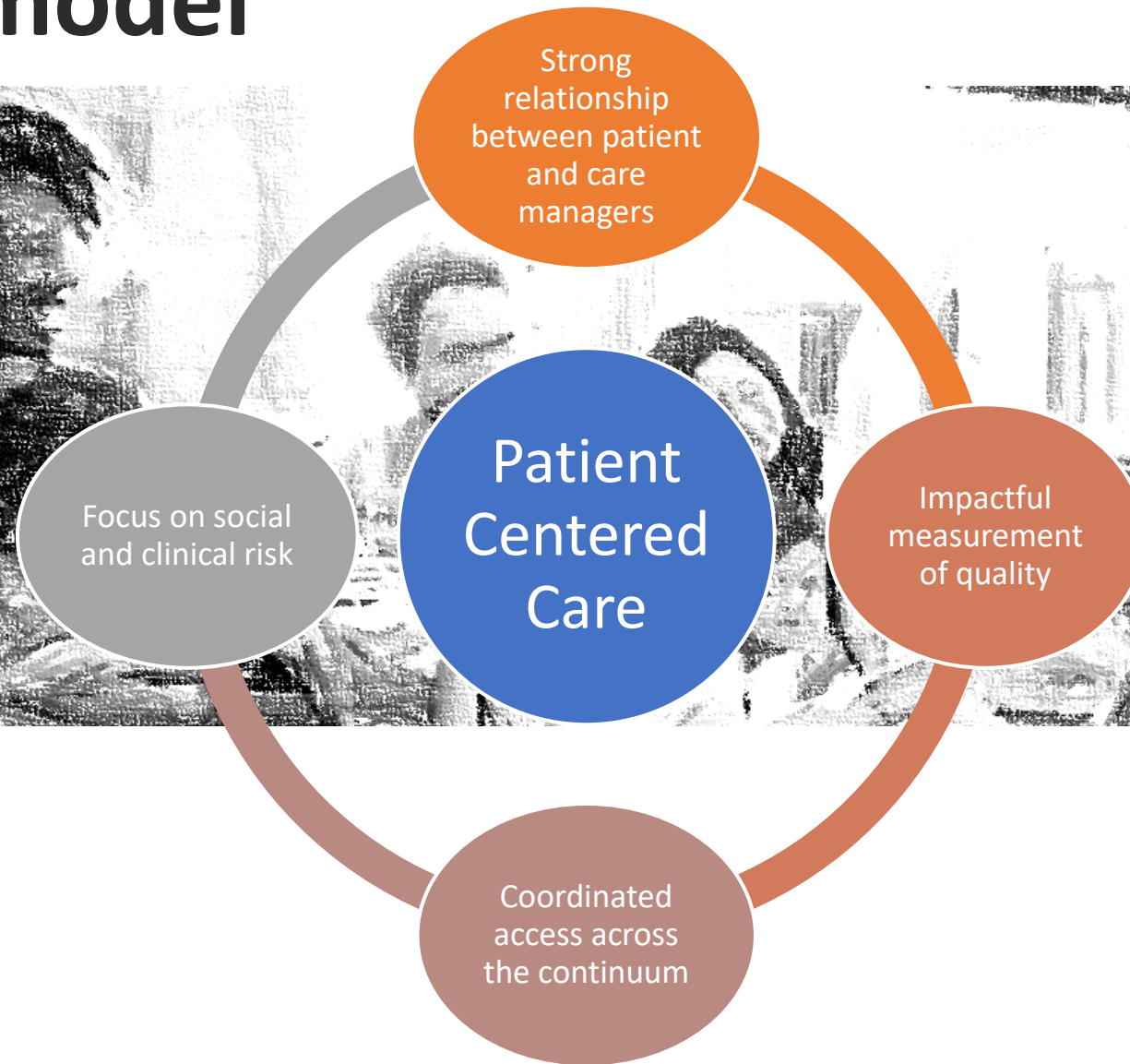
- 2020 was a bad year for FFS
- Focus on broadening capabilities, speed, scale, and flexibility
- Expansion of Value – focus on SDoH/integrated health
- Member expectations, experience, and engagement

Change in Technology

- Advanced analytics – NLP, Machine learning, AI
- Interoperability, bi-directional data flow
- Clinical point of care data integration



The new model



Value-based care core principals

VBP models need to create a foundation for long-term success:

Flexible

- Target Setting:
 - MLR/TCC
 - Quality
- Service exclusions
- Member exclusions
- Stop Loss

Realistic

- Continuous improvement
- Broad based metrics aligned with action
- Leverage existing infrastructure

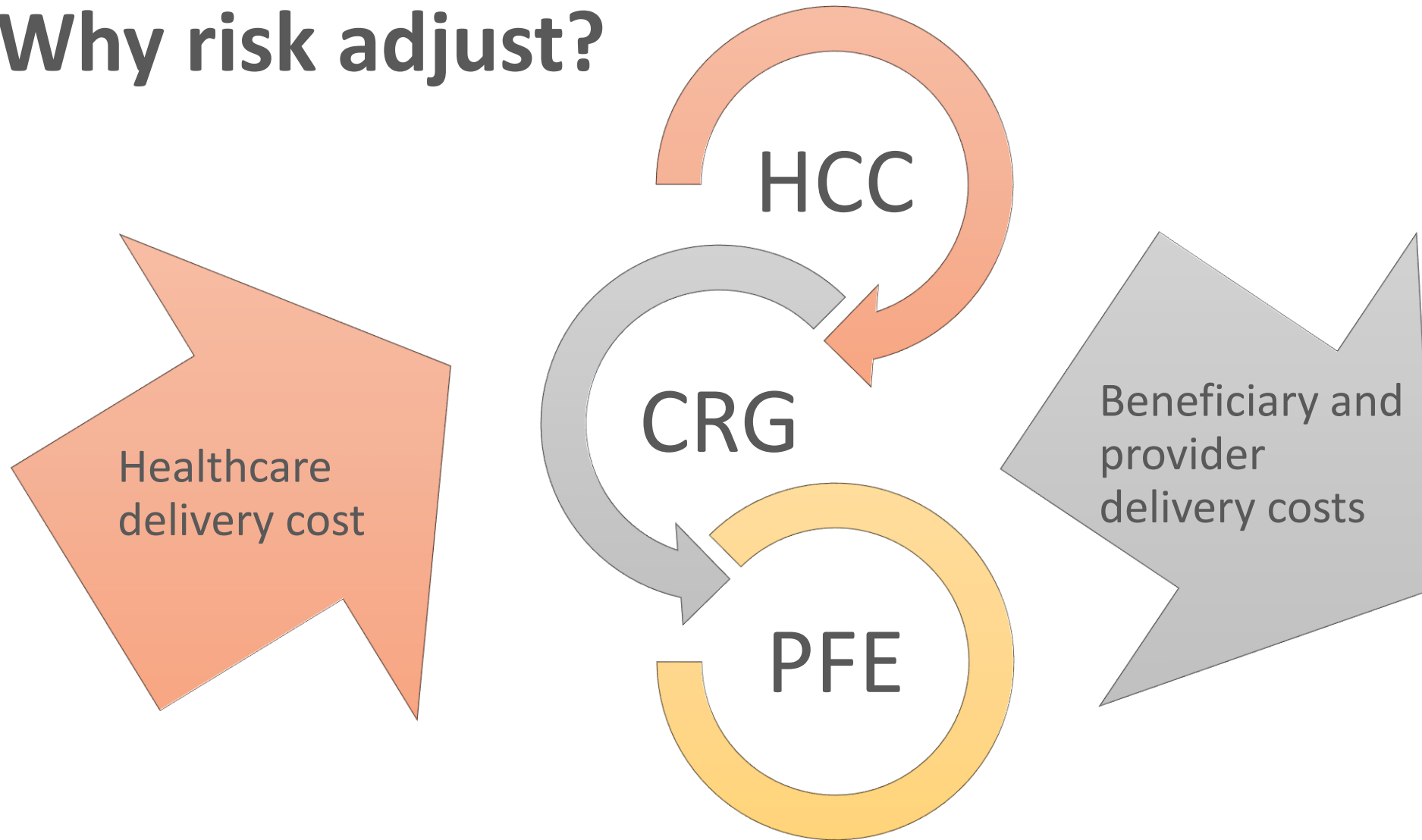
Impactful

- Demonstrate ROI
- Improved quality/care coordination
- Outcomes over process
- People, not disease focused

Risk-adjustment is at the core of all the above principals

Why risk adjustment is critical to value-based programs

Why risk adjust?



What are HCC and 3M CRG models?

HCC and 3M CRG models are examples of two different methods used to risk adjust for the financial impact of a patient's disease burden. Private insurers may pick their own model to determine how they risk adjust for their provider and organizational contracts.

Clinical Risk Groups (CRG)



3M proprietary model, primarily used by private payers and state agencies. One model for all patient types which is suitable for all populations.

Hierarchical Condition Categories (HCCs)



Used by CMS, Medicaid agencies, and private payers. Two models.

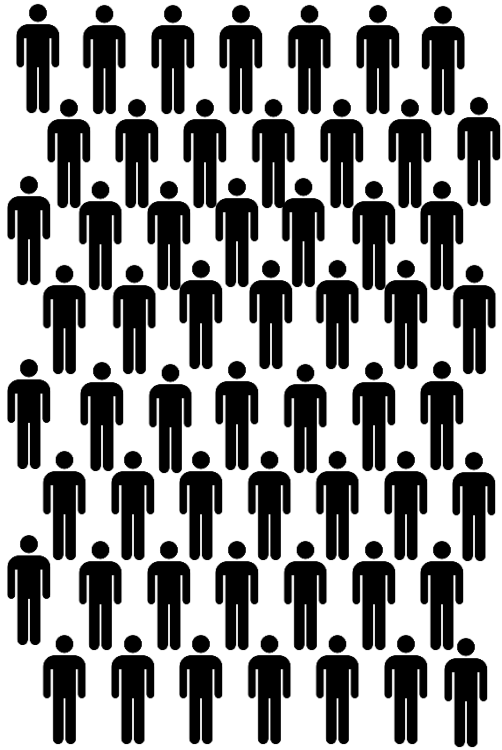
- CMS Medicare – Used primarily to determine next year's payments for Medicare advantage plans
- HSS Medicaid – Used for private and state-based payment partnerships to determine next claim payment in the current year

Why do we need risk adjustment?

Base Condition(s) and Diagnosis codes	3M CRG assignment	CRG Weight	PMPM	IP Visits PKPY	ER Visits PKPY
Opioid Dependence <i>F11.20 Opioid dependence, unspecified</i>	CRG 57831 Opioid Abuse/Dependence Level - 1	1.732	\$ 393.92	90	1,433
Opioid Dependence + Overdose <i>F11.20 Opioid dependence, unspecified</i> <i>T507X1A Poisoning by analeptics and opioid receptor antagonists, accidental (unintentional), initial encounter</i>	CRG 57832 Opioid Abuse/Dependence Level - 2	2.811	\$ 437.12	260	1,247
Opioid dependence + Overdose + Schizophrenia <i>F11.20 Opioid dependence, unspecified</i> <i>T507X1A Poisoning by analeptics and opioid receptor antagonists, accidental (unintentional), initial encounter</i> <i>F20.9 Schizophrenia, unspecified</i>	CRG 61213 Dominant Chronic Mental Health Disease and Other Dominant Chronic Substance Abuse Level - 3	9.676	\$ 1,092.61	903	1,518

Source: Sample State Medicaid Managed Care plan data CRG v2.1

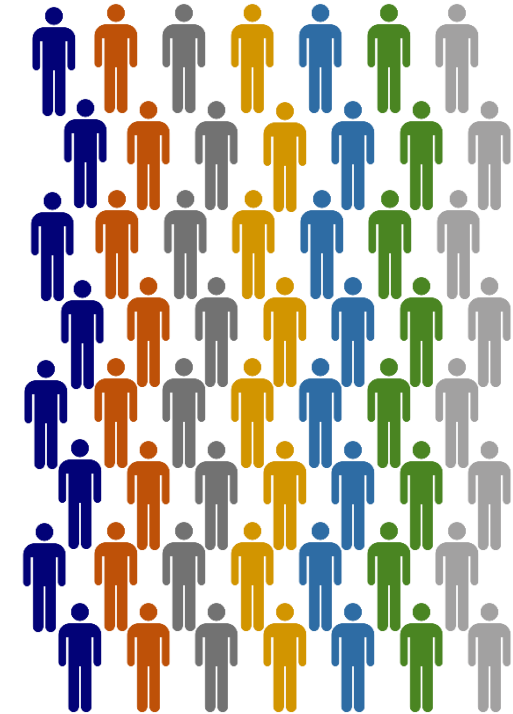
Create groups of clinically similar individuals



The 3M™ Clinical Risk Groups (CRG) will assign each person to their own clinical category. There are over 1,400 categories that can be assigned, which includes up to 6 severity levels.



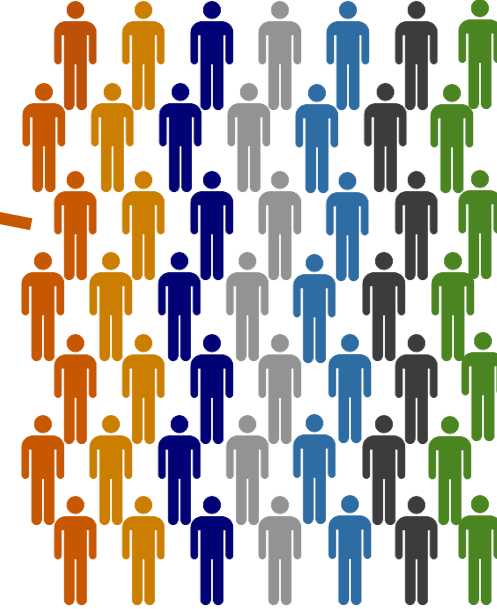
The condition assignment is primarily driven off of diagnosis codes, but other factors including interaction with the healthcare system can contribute to the clinical assignment of the individual. No financial information is used to assign CRGs.



Compute averages for clinically similar individuals

Member	CRG	Member Months	ED Visits	IP Admits	Total Paid	PPVs	PPAs	...
Member1	CRG 12345	10	5	2	\$1,000	3	1	
Member2	CRG 12345	12	4	1	\$1,500	2	0	
Member3	CRG 12345	9	3	0	\$700	0	0	
...								
Total for CRG 12345		150,000	37,500	18,750	\$15,000,000	30,000	9,375	
Average			3.00	1.50	\$ 1,200	2.40	0.75	

These values become the expected values for any person with CRG 12345



Member	CRG	Member Months	ED Visits	IP Admits	Total Paid	PPVs	PPAs	...
Member1	CRG 56789	10	0	0	\$200	0	0	
Member2	CRG 56789	12	1	0	\$500	1	0	
Member3	CRG 56789	9	0	0	\$150	0	0	
...								
Total for CRG 56789		900,000	56,250	7,500	\$ 13,125,000	52,500	6,750	
Average			0.75	0.10	\$ 175	0.70	0.09	

These values become the expected values for any person with CRG 56789

Using risk adjustment to measure performance

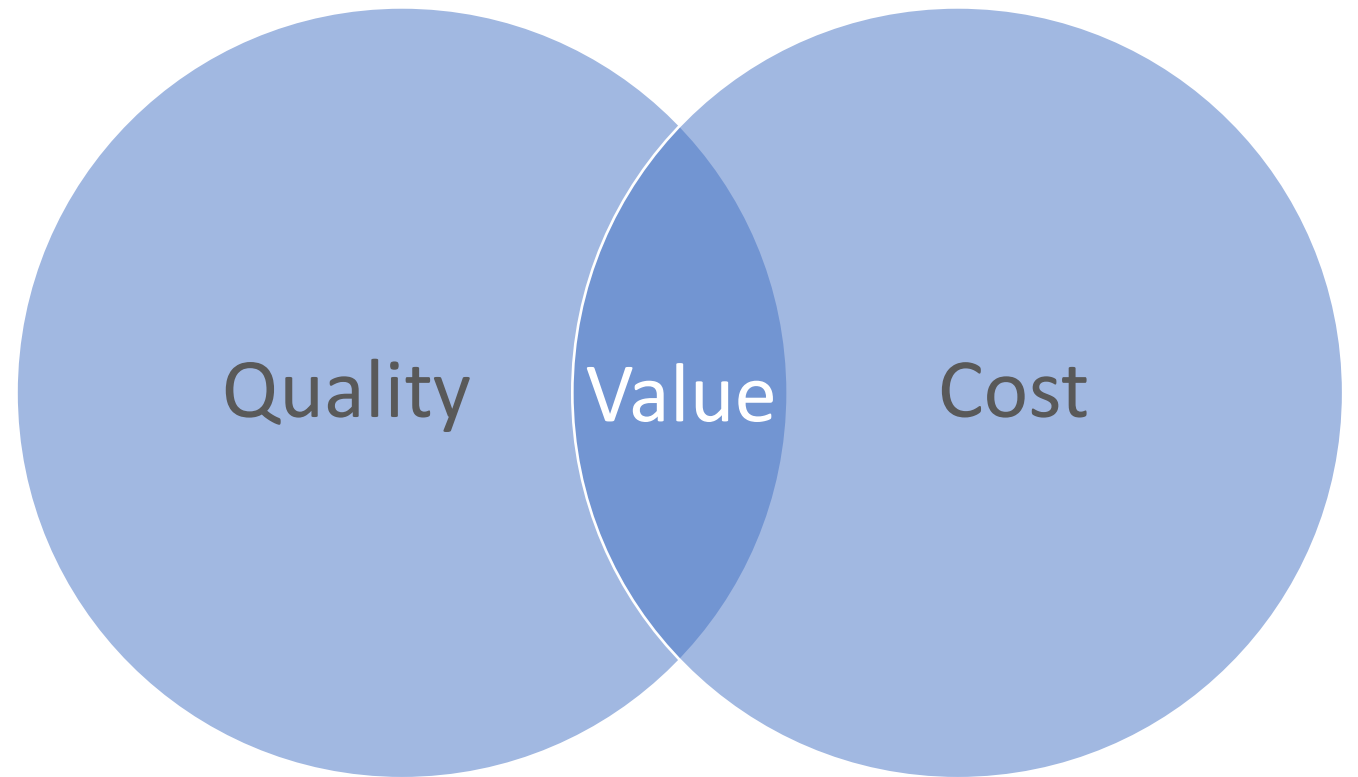
Provider Entity	Members	Member Months	CRG Weight	Total Paid PMPM \$	Total Expected Paid PMPM \$	Total %Diff.
Provider 1	66,322	708,580	1.204	\$483.31	\$457.73	5.6%
Provider 2	12,139	130,494	1.285	\$477.08	\$489.87	-2.6%
Provider 3	17,040	182,377	0.817	\$315.43	\$297.60	6.0%
Provider 4	4,297	45,719	1.139	\$477.18	\$424.24	12.5%
Provider 5	43,832	472,835	1.270	\$483.70	\$481.63	0.4%
Provider 6	19,916	211,067	1.546	\$607.64	\$599.99	1.3%
Provider 7	121	1,328	2.202	\$667.45	\$813.87	-18.0%
Provider 8	278,236	2,458,729	0.689	\$239.66	\$261.82	-8.5%
Provider 9	4,535	47,959	1.516	\$634.48	\$562.56	12.8%
Provider 10	14,398	154,927	1.245	\$474.01	\$466.27	1.7%
Aggregate	637,250	6,311,009	1.000	\$378.48	\$378.48	0.0%

Apples to apples performance comparison because this metric measure the distance from the risk-adjusted expected value

Valued-based care performance measurement

Financial and quality measures should be risk adjusted

- Spend by member or provider
- Process Measures
 - Chronic care follow-up
 - Preventative measures that are not needed under current treatment
- Outcome Measures
 - Inpatient stays
 - ED visits
 - Potentially preventable events



New measures of value

3M Potentially Preventable Events



3M™ Potentially Preventable Readmissions

Result of poor continuity and/or transitions of care



3M™ Potentially Preventable Complications

Result of insufficient processes of care



3M™ Potentially Preventable ED Visits

Result of inadequate access to care



3M™ Potentially Preventable Admissions

Result of inadequate access to care



3M™ Potentially Preventable Ancillary Services

Avoidable services outside inpatient setting



Over treatment

Complications

Poor access

Unnecessary services

Inappropriate care

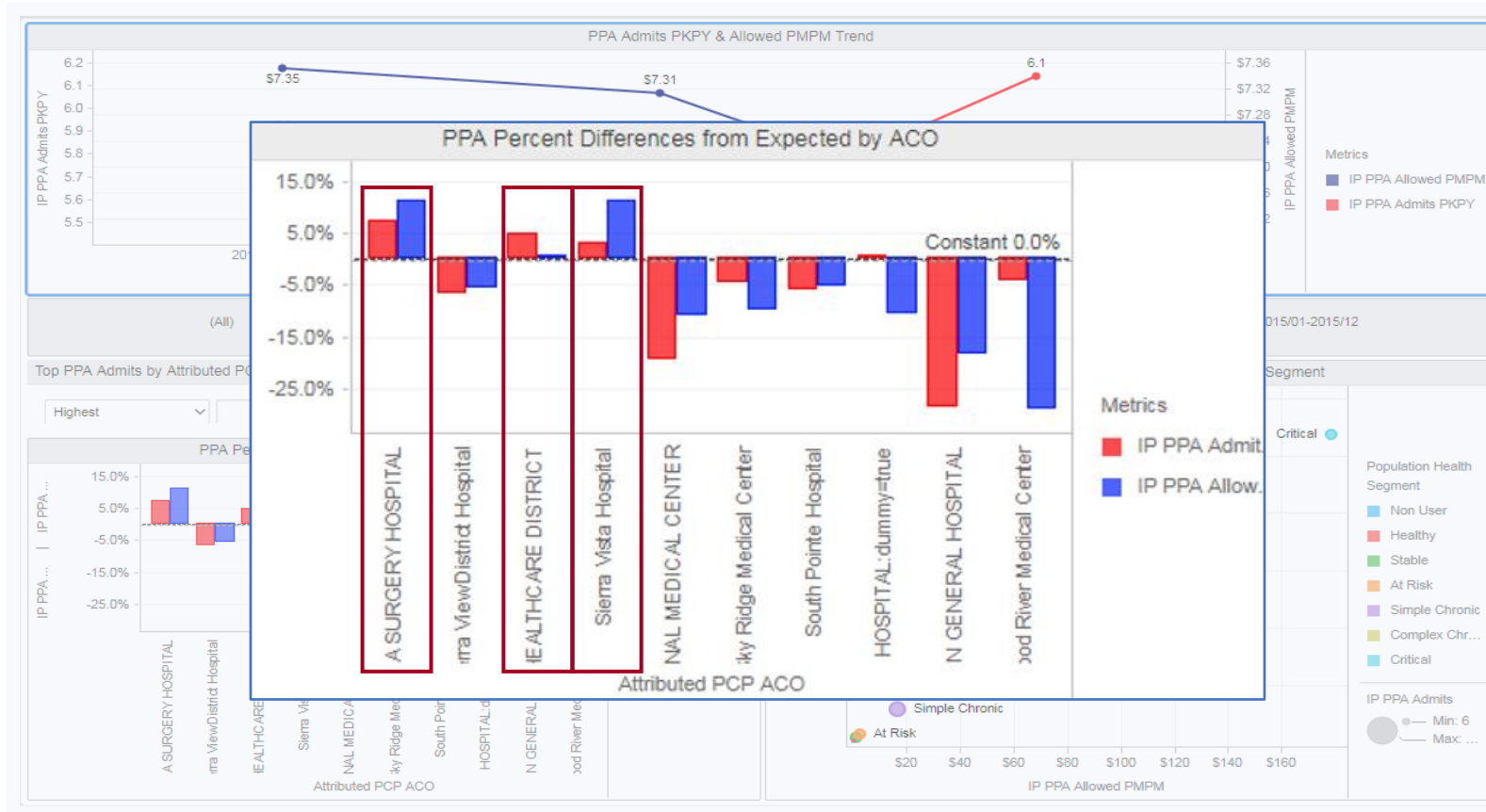
3M approach to potentially preventable events

- Not all events are preventable, but meaningful reductions can be achieved, saving money and improving health
- Comparisons should always be risk adjusted and focus on overall rates, not individual events
- Expected rates depend on the illness burden of the health plan, hospital, or other population

Example of Potentially Preventable Admission A/E Calculations			
	Actual PPAs	Expected PPAs	A / E
High-acuity MCO	100	120	0.83
Low-acuity MCO	100	80	1.25
All MCOs	200	200	1.00

*A/E ratios > 1.00 are worse than expected, A/E ratios < 1.00 => better than expected
“A/E ratios,” “Actual minus expected,” and “risk adjusted rates per 1,000 beneficiaries” are merely alternative presentations of the same concept*

Value-based programs require data



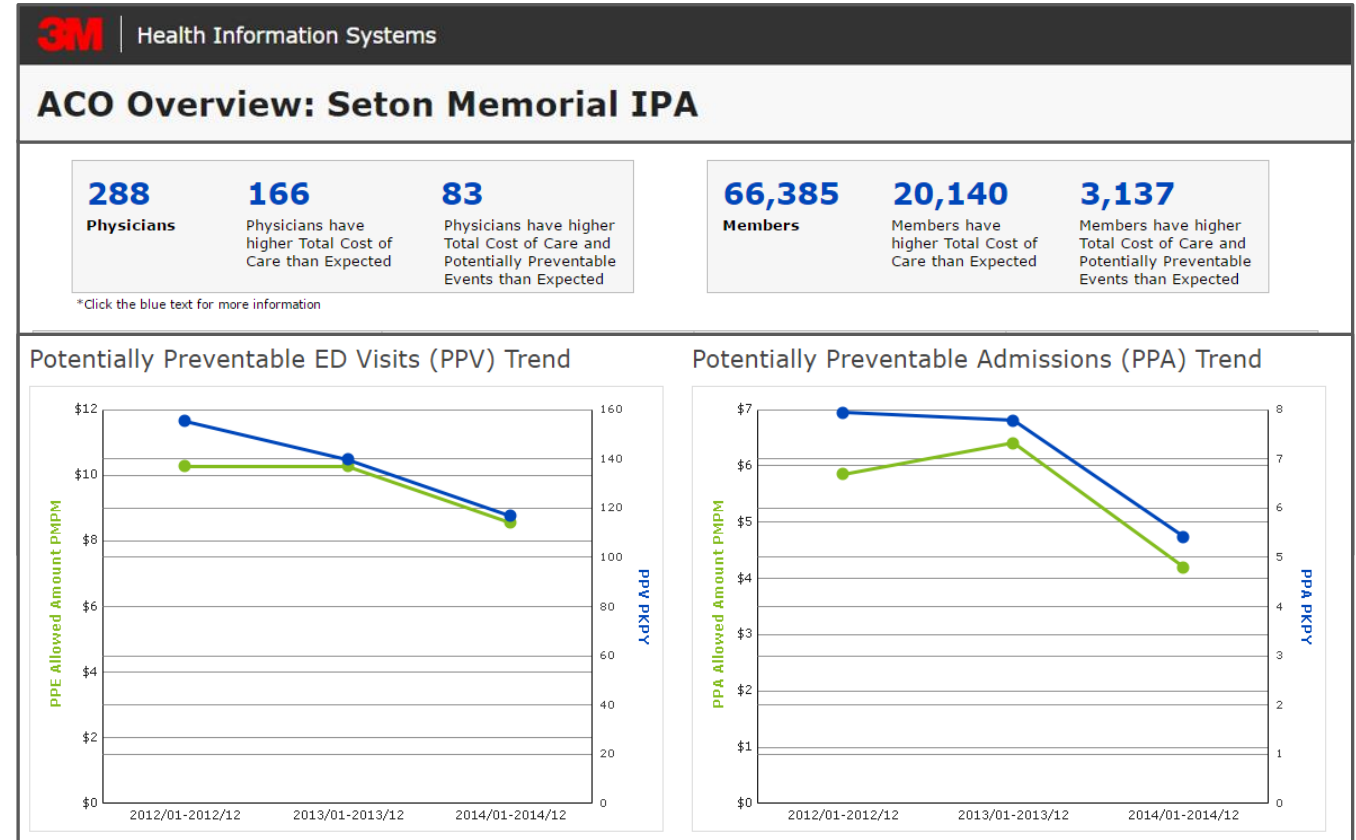
- Financial incentives must be accompanied by detailed opportunities for improvement
- Identify the population and attributed providers where PPA spend and utilization is higher than risk-adjusted expected

Data from 3M Demo Dataset

Value-based programs require data sharing

For value-based programs to be successful, data should be shared with provider partners and be:

- Actionable
- Aligned with targets
- Easily integrated



Data from 3M Demo Dataset

*Blue texts indicate hyperlink to physician/member lists

Adding insight into clinical workflows

The reality of value-based care



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Integrating data into the clinical workflow

- Gaps in care dashboard is based on process measures
- Are helpful as part of the analytics picture – but not necessarily VBP

Primary and Secondary Prevention : Breast Cancer Screening						
Primary and Secondary Prevention: Breast Cancer Screening						
Person	Person Age In Years	BCS: Eligibility (P)	BCS: Screening Goal Met in Prospective Period (P)	BCS: Date of Latest Mammogram (H)	BCS: Provider for Latest Mammogram (H)	
Billinsley, Medwin	69	Eligible	No	2/19/2016	Ellis Red Specialty Hospital	
Detty, Dini	66	Eligible	No	10/4/2016	Ellis Red Specialty Hospital	
Sackey, Stuart	72	Eligible	Yes	10/16/2017	Ellis Red Specialty Hospital	
Baillif, Laurence	54	Eligible	Yes	10/26/2017	Bilguun Blanco (DEID) MD	
Prisk, Kathi	61	Eligible	Yes	11/6/2017	Fawzia el-Rasheed (DEID) MD	
Waters, Nicky	57	Eligible	Yes	11/10/2017	Franki Donahue (DEID) MD	
Dool, Takeshi	72	Eligible	Yes	11/20/2017	Ellis Red Specialty Hospital	
Susmilch, Felton	59	Eligible	Yes	12/18/2017	Dua Chawla (DEID) MD	
Wollan, Wayland	62	Eligible	Yes	12/21/2017	Ellis Red Specialty Hospital	
Heimbuch, Harminder	67	Eligible	Yes	1/5/2018	Brytneigh Darnell Anderson (DEID) MD	
Mikhaiel, Katelyn	70	Eligible	Yes	1/26/2018	Ellis Red Specialty Hospital	
Tilton, Sandipan	65	Eligible	Yes	1/30/2018	Ellis Red Specialty Hospital	
Feece, Maurita	73	Eligible	Yes	1/31/2018	Ellis Red Specialty Hospital	
Liebe, Elma	62	Eligible	Yes	2/26/2018	Fawzia el-Rasheed (DEID) MD	
Planer, Sleem	68	Eligible	Yes	2/27/2018	Ashlyn Ryan (DEID) MD	
Byram, Dumitru	66	Eligible	Yes	3/19/2018	ALLEN R. HILL (DE-ID) MD	
Cruthird, Barbro	73	Eligible	Yes	5/8/2018	Ellis Red Specialty Hospital	
Rummell, Alysia	74	Eligible	Yes	5/10/2018	Ellis Red Specialty Hospital	

CONTENTS

8 Chapters
17 Pages

- Cover
- Primary and Secondary Prevention
 - Breast Cancer Screening
 - Colorectal Cancer Screening Index
 - Well-Child Visits in the First 15 Months
 - Well-Child Visits for Age 15 - 30 Months
 - Child and Adolescent Well-Care Visits
- Tertiary Prevention
 - Potentially Preventable Admissions
 - Potentially Preventable ER Visits
- Panel Health Status Change
 - Health Status Jumpers
- Chronic and Follow-up Care
 - Potentially Preventable Readmissions
 - Post-discharge Follow-up

Data from 3M Demo Dataset

Adding risk-adjusted elements into the clinical workflow

Available care management flags:

- Evidence of Chronic*
- Newly Chronic*
- Chronic Fallouts*
- Chronic Severity Jumpers*
- Chronic Status Jumpers*
- Members with a PPA
- Members with a PPV
- No Follow-up
- Lack of Office Visits

Chronic Fallout Members						
Person	CRG	Previous CRG	TCC	TCC % Diff		
Zientek, Temeka	33572	Osteoarthritis Level - 2	63112	Diabetes and Other Dominant Chronic Disease Level - 2	\$5,887	-40.4%
Zambito, Ketan	34411	Obesity NOS/Body Mass Index 30.0 to 39.9 Level - 1	64601	Other Dominant Chronic Disease and One or More Moderate Chronic Disease Level - 1	\$3,998	15.2%
Whitacre, Melody	30791	Cataracts Level - 1	63151	Diabetes and Other Moderate Chronic Disease Level - 1	\$678	-84.0%
Viars, Avrom	37541	Attention Deficit/Hyperactivity Disorder Level - 1	64212	Moderate Chronic Mental Health Disease and Other Moderate Chronic Disease Level - 2	\$2,053	-29.7%
Uihlein, Lorita	33511	Disc Disease and Other Chronic Back Diagnoses Level - 1	61253	Dominant Chronic Substance Abuse and Other Moderate Chronic Disease Level - 3	\$1,435	-34.3%
Turturo, Ellyn	34411	Obesity NOS/Body Mass Index 30.0 to 39.9 Level - 1	63151	Diabetes and Other Moderate Chronic Disease Level - 1	\$16,299	689.3%
Trigg, Janean	31431	Sleep and Obstructive Apnea Level - 1	63132	Diabetes and Hypertension Level - 2	\$1,653	-43.9%
Sweeting, Berge	37551	Depression Level - 1	64803	Other Moderate Chronic Disease and Hypertension Level - 3	\$2,960	6.9%
Person	CRG	Previous CRG	TCC	TCC % Diff		
Suk, Branimir	34451	Hyperlipidemia Level - 1	64411	Asthma and Hypertension Level - 1	\$4,125	99.6%
Stollsteimer, Kelvin	33511	Disc Disease and Other Chronic Back Diagnoses Level - 1	63131	Diabetes and Hypertension Level - 1	\$671	-79.8%
Stiffler, Keila	10000	Healthy	63171	Coronary Artery Disease and Other Moderate Chronic Disease Level - 1	\$44	-92.5%
Slimmer, Lennard	38431	History of Malignancy Level - 1	62502	Other Dominant Chronic Malignancy and Other Moderate Chronic Disease Level - 2	\$6,349	158.8%
Slaboda, Kyra	10000	Healthy	63111	Diabetes and Other Dominant Chronic Disease Level - 1	\$16	-93.6%
Serrant, Rupinder	10000	Healthy	64601	Other Dominant Chronic Disease and One or More Moderate Chronic Disease Level - 1	\$1,059	60.4%
Sayaphon, Lok	33511	Disc Disease and Other Chronic Back Diagnoses Level - 1	61253	Dominant Chronic Substance Abuse and Other Moderate Chronic Disease Level - 3	\$539	-75.7%
Rubash, Song	33571	Osteoarthritis Level - 1	64602	Other Dominant Chronic Disease and One or More Moderate Chronic Disease Level - 2	\$72,014	1952.4%
Rhew, Inocencia	10000	Healthy	54393	Chronic Metabolic and Endocrine Diagnoses - Major Level - 3	\$56,647	7042.1%
Respers, Hoda	34411	Obesity NOS/Body Mass Index 30.0 to 39.9 Level - 1	64601	Other Dominant Chronic Disease and One or More Moderate Chronic Disease Level - 1	\$2,717	32.5%
Pasto, Sarla	33571	Osteoarthritis Level - 1	63131	Diabetes and Hypertension Level - 1	\$825	-80.4%
Oscarson, Yasmeeen	37571	Chronic Stress and Anxiety Diagnoses Level - 1	52663	Inflammatory Bowel Disease Level - 3	\$5,004	53.4%
Nybo, Armanda	34092	Psoriasis Level - 2	61253	Dominant Chronic Substance Abuse and Other Moderate Chronic Disease Level - 3	\$3,888	-47.1%
Nutley, Debby	31421	Other Chronic Pulmonary Diagnoses Level - 1	51333	Chronic Obstructive Pulmonary Disease and Bronchiectasis Level - 3	\$1,592	-77.0%
Nassif, Harrison	10000	Healthy	63111	Diabetes and Other Dominant Chronic Disease Level - 1	\$876	6.4%
Morgenthaler, Morena	10000	Healthy	63142	Diabetes and Coronary Artery Disease Level - 2	\$399	-32.4%

* Uses 3M CRGs as the basis for identifying members that could be targeted for care management

Data from 3M Demo Dataset

The complete clinical picture

- Patient profile dashboard – can be used retrospectively or at the point of care

3M | Health Information Systems

 Patient Profile

Member: **Pincock, Fotini**
 Period: **2017/07-2018/06**

DOB 1/1/1956 PCP **Amariz Shumway (DE-ID) MD** Health Segment **Complex Chronic**
 Age **62** PCP Group **790286007:Swedish Medical Center/Cherry Hill Campus CRG** **70806:Congestive Heart Failure - Diabetes - Other Dominant Chronic Disease Level - 6**
 Sex **Female**

Utilization Summary

Total Visits	220
Inpatient	4
Outpatient Visits (Non ER)	7
ER Visits	2
Professional	
PCP	15
Specialist	192
Pharmacy Summary	
Unique Prescriptions	69
Total Prescriptions	211

PPE Summary

Total Potentially Preventable Events	4
Potentially Preventable Admissions	N/A
Potentially Preventable Readmissions	2
Potentially Preventable ED Visits	2

Problem List

- 1 Congestive Heart Failure
- 2 Diabetes
- 3 Alzheimer's Disease and Other Dementias
- 4 Other Major Chronic Pulmonary Diagnoses
- 5 Connective Tissue Disease and Vasculitis
- 6 Chronic Hematologic/Immunologic Diagnoses - Moderate
- 7 Chronic Gastrointestinal Diagnoses - Minor
- 8 Disc Disease and Other Chronic Back Diagnoses
- 9 Hyperlipidemia
- 10 Osteoporosis

Inpatient

Admit Date	Servicing Provider	CCS Category	Primary Dx	Preventable Code
3/17/2018	Monty Regional Hospital	Septicemia (except in labor)	A403 Sepsis due to Streptococcus pneumoniae	IP PPR
2/17/2018	Monty Regional Hospital	Complications of surgical procedures or medic	T8189XA Other complications of procedures, not elsewhere classified, initial encounter	IP PPR
1/24/2018	Monty Regional Hospital	Diabetes mellitus with complications	E11621 Type 2 diabetes mellitus with foot ulcer	Non-Preventable
11/14/2017	University Hospital at Farmingdale	Chronic ulcer of skin	L97519 Non-pressure chronic ulcer of other part of right foot with unspecified severity	Non-Preventable

Outpatient ER

Visit Service Start Date	Servicing Provider	CCS Category	Primary Dx	Preventable Code
12/29/2017	Monty Regional Hospital	Diabetes mellitus with complications	E09621 Drug or chemical induced diabetes mellitus with foot ulcer	Has PPV
10/2/2017	Monty Regional Hospital	Fluid and electrolyte disorders	E871 Hypo-osmolality and hyponatremia	Has PPV

Outpatient

Visit Service Start Date	Servicing Provider	CCS Category	Primary Dx	Preventable Code
3/15/2018	Newton Medical Group - North	Complications of surgical procedures or medic	T8789 Other complications of amputation stump	Non-Preventable
2/5/2018	Newton Medical Group - North	Other aftercare	Z4781 Encounter for orthopedic aftercare following surgical amputation	Non-Preventable
1/27/2018	University Hospital at Farmingdale	Diabetes mellitus with complications	E11621 Type 2 diabetes mellitus with foot ulcer	Non-Preventable
1/23/2018	University Hospital at Farmingdale	Immunity disorders	D801 Nonfamilial hypogammaglobulinemia	Has PPS
12/22/2017	Park View HealthCare Group	Other connective tissue disease	M79A22 Nontraumatic compartment syndrome of left lower extremity	Has PPS
12/4/2017	Monty Regional Hospital	Systemic lupus erythematosus and connective t	M359 Systemic involvement of connective tissue, unspecified	Has PPS
10/26/2017	University Hospital at Farmingdale	Immunity disorders	D801 Nonfamilial hypogammaglobulinemia	Has PPS



Data from 3M Demo Dataset

Poll Question #1:

Does your organization currently have a program in place that addresses both social and clinical risk?

- A. Yes
- B. No
- C. Unsure



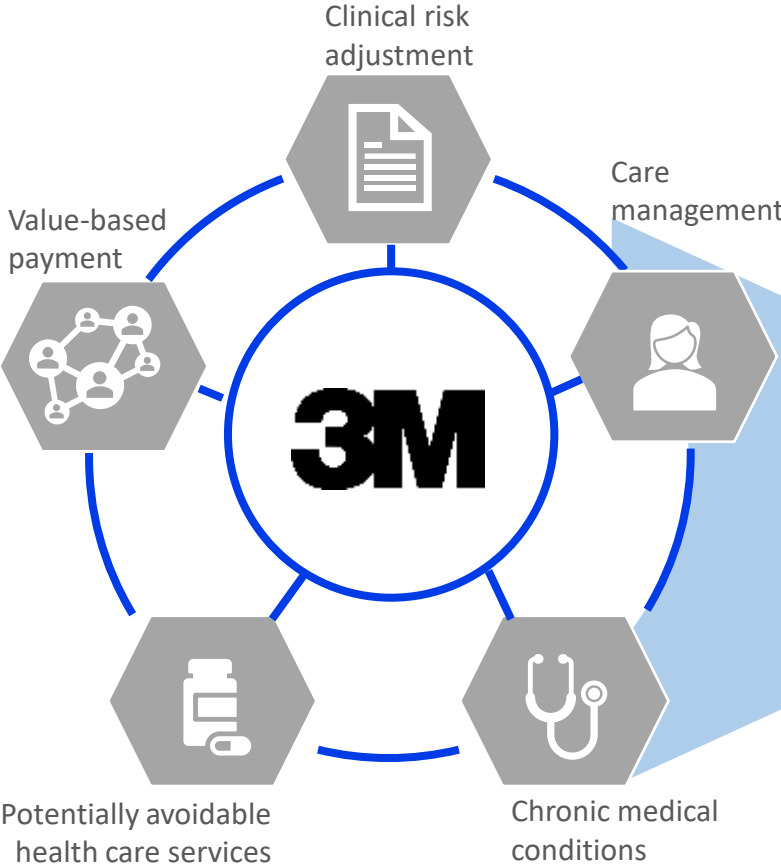
Integrating social risk

Social factors impact our ability to achieve optimal health



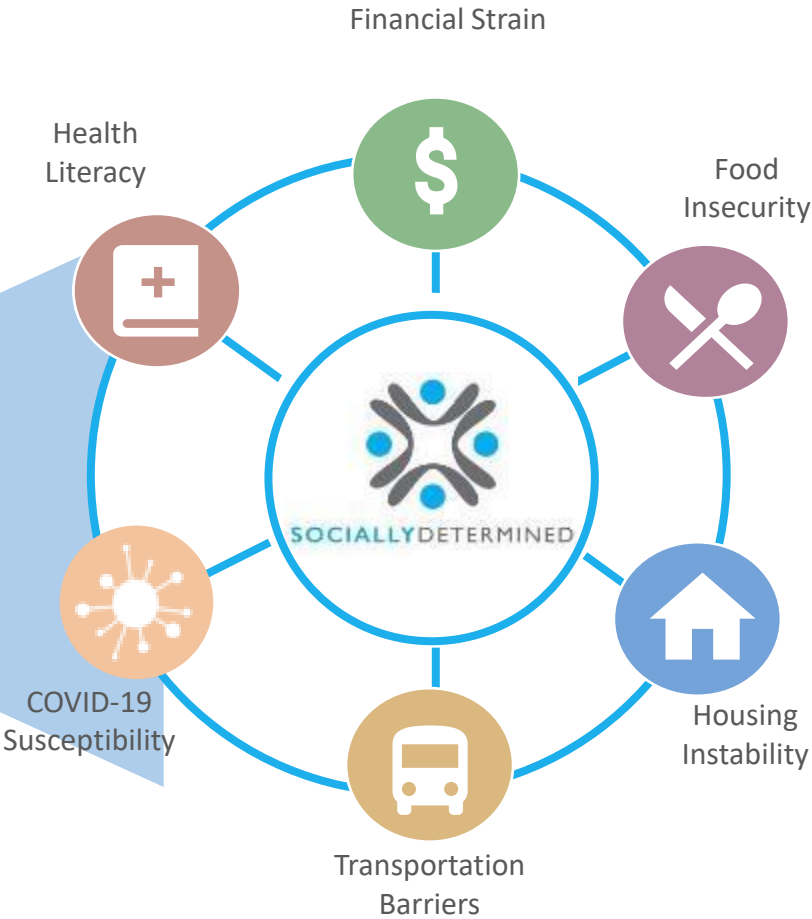
A Complete Patient Picture

Clinical Factors



Using 3M's clinical expertise combined with social risk factors allows for integrated whole-person population health analytics at scale.

Social Factors



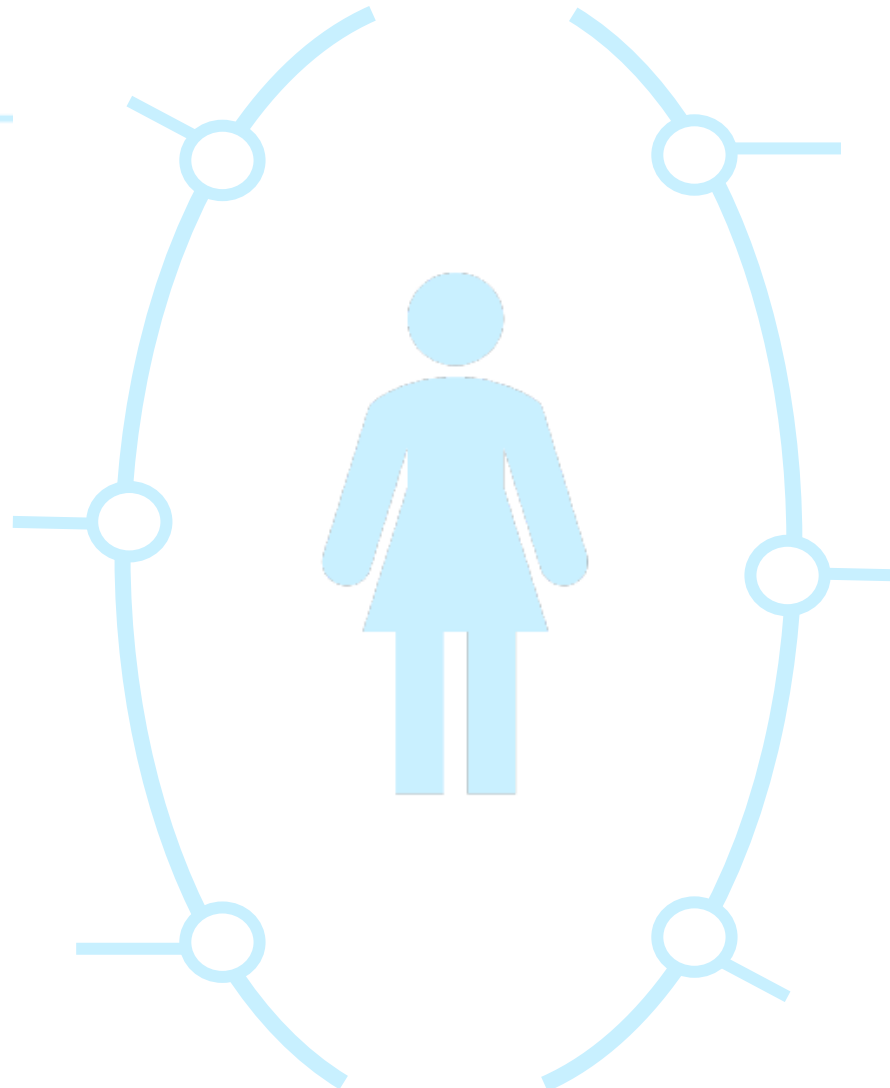
Example of Social Risk Complete picture of risk

Demographics

67 year old female  Member for >3.5 years

3M Clinical Risk Score

CRG	70602
Patient Segment	Multiple Complex Chronic
Description	Congestive Heart Failure - Diabetes - Chronic Obstructive Pulmonary Disease
Severity	Level 2



Lifestyle & Living Situation

\$40K Est. Annual Income  **Lives Alone**

 **Homeowner** **70+** Year Old Home **\$200K** Home Value  **Owens a Car**

Accessibility & Location

Lives far from a **pharmacy**  And far from **healthy food options** 

SOCIALLY DETERMINED

Social Risk Scores



Socio-clinical risk strengthens value-based care

Manage care



- ✓ Enables more efficient, comprehensive care management
- ✓ Proactive outreach to members with high or rising social risk
- ✓ Promotes effective program design and collaboration with CBOs

Monitor performance



- ✓ Ensures accurate social risk is captured through coding
- ✓ Optimizes performance in value-based programs
- ✓ Monitors the effectiveness of CBO program design

Build value-based networks

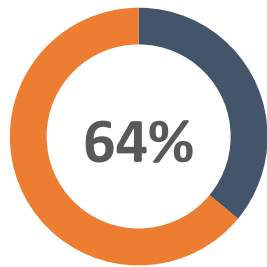


- ✓ Broaden VBP model design to effectively address SDoH and promote health equity
- ✓ Strategically allocate resources to those providers whose attributed populations have greater adverse social factors

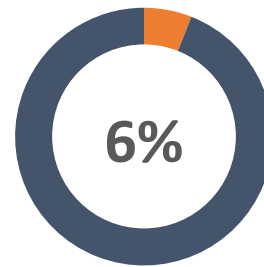
Engaging Specialists in Value-Based Care

Expand value-based payment models

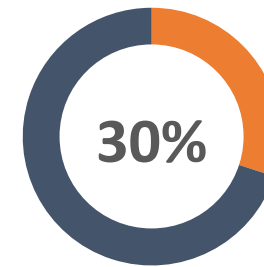
30% of members who accessed medical services in the past year did NOT receive a service from a primary care physician.



Received services from the PCP group the member chose.



Received services from a PCP group other than the one the member chose.



Accessed medical services but did not receive their care from a PCP.

Engaging specialists through episodes of care

- Episodes of care reporting provides an objective, transparent measure of specialty care referrals, practice patterns, and outcomes
- Primary care physicians can then use the data to more effectively coordinate care for their members and establish relationships with key specialists in the area.



3M™ Patient-Focused Episodes (PFE)

A single comprehensive unit of service for the treatment of a patient

- Transparent, categorical clinical model leveraging well-established methodologies
- Identifies patients' specific diseases episodes, and risk adjusts based on the clinical risk of the whole person
- Assigns single specialist to each episode for accountability
- Encompasses the total services rendered to a patient during an episode
 - Across multiple settings
 - Across multiple providers
 - Within a prescribed window of time
- Flexible implementation (services, setting, time windows)



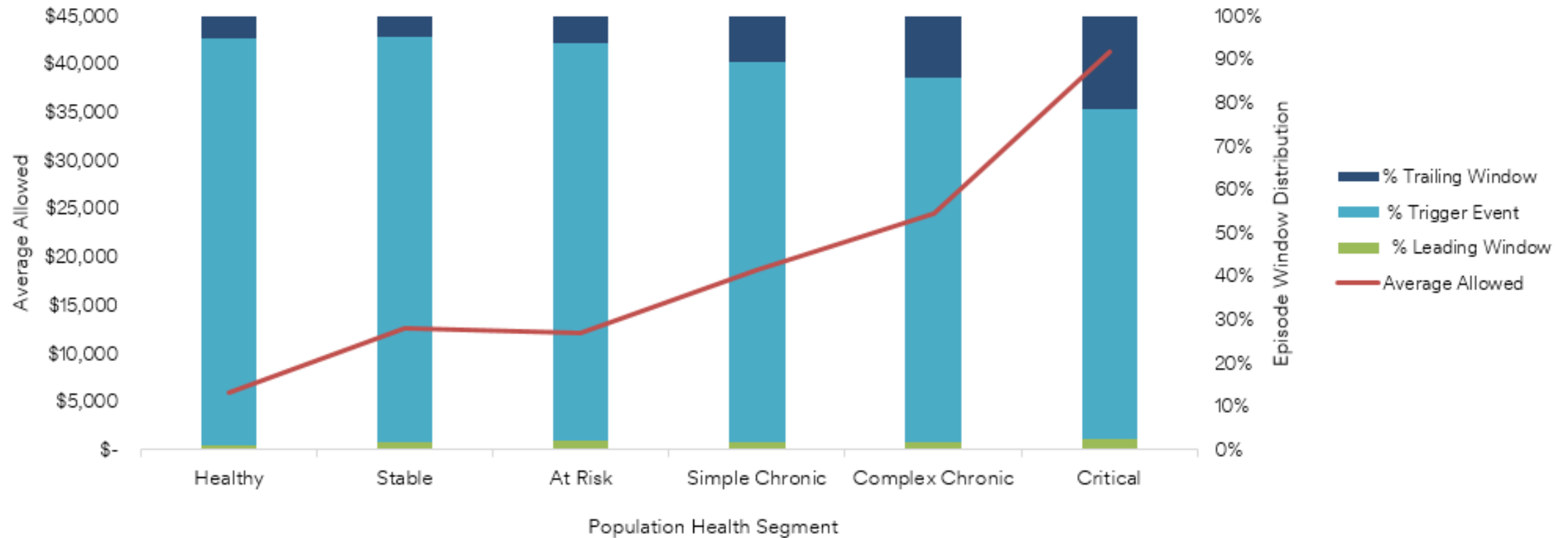
Application of an event-based 3M PFE

Impact of co-morbidities on patient-focused surgical episodes

	Single Chronic	Multiple Chronic
3022 - Knee Replacement		
Average Allowed	\$25,671	\$30,219
PPR Rate	0.8%	5.3%
3011 - Hip Replacement		
Average Allowed	\$24,776	\$31,226
PPR Rate	1.2%	13.6%

Application of an event-based 3M PFE

Inpatient Average Allowed by Population Health Segment



Data from 3M Demo Dataset

Poll Question #2:

How familiar were you with 3M™ Clinical Risk Groups (CRGs) prior to today's webinar?

- A. This is my first introduction to 3M CRGs
- B. I have a very basic understanding of 3M CRGs
- C. I have a moderate understanding of 3M CRGs
- D. I would consider myself an expert in 3M CRGs



THANK YOU

