



# Rules Engine National Quality Measures

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THOMSON REUTERS

# AGENDA

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- Brief definitions
- Structure
- Quality measures in the DAI
- How the measures are different than HEDIS
- Gaps in Care measures in the DAI
- Patient Health Record (for Gaps in Care)

# QUALITY MEASURES

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- Evidence-based guidelines
  - Given a clinical situation
  - Something should be done (or not done)
  - Based on clinical research, not anecdotal experience or conventional wisdom
- Outcomes measures
  - Did a desired outcome occur
  - Was an undesired outcome avoided (admission ER visit)

# BASIC QUALITY MEASURES STRUCTURE

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- Denominator
  - People with Disease
  - People with the right demographics for preventive care
  - Continuously enrolled to be certain of numerator
  - Not disqualified
- Numerator
  - The desired procedure has taken place
  - The undesired procedure has not taken place

# NATIONAL QUALITY FORUM

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- HEDIS is the leading standards organization
- We are looking to NQF for measure adoption
- Using measures as defined – not second guessing criteria

## HEDIS-BASED MEASURES – 3 GROUPS

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- Event measures—*for patients who experience event A, (e.g., admission or ambulatory visit for a specified condition), how many of them had procedure B*
- Diseased population measures—*for patients with a particular disease, how many had a specified procedure*
- General population measures—*for patients of a certain age and/or gender, how many had a specified procedure*

# HEDIS-BASED MEASURES – 3 GROUPS

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## Event Measures

- Pats Low Back % wo Imag Studies
- Pats Child Pharyn % Strep Tests
- Pats Child URI % wo Antibiotics
- Pats MH % Post Disch Visit

## Diseased Population Measures

- Pats Epis Asthma % Asthma Drugs
- Pats Epis Diabet % Eye Exams
- Pats Epis Diabet % HbA1c Tests
- Pats Epis Diabet % Kidney Svcs
- Pats Epis Diabet % LDL Tests

## General Population Measures

- Pats Women % Chlamydia Tests
- Pats Adolescent % Well Care
- Pats Child 1 to 2 % Prim Care
- Pats Child 2 to 6 % Prim Care

# REMAINING DIFFERENCES FROM NATIONAL MEASURES

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- Detailed in Analytic Guide on Customer Portal (See example)
- Missing Some Exclusions
- Differ with regard to age



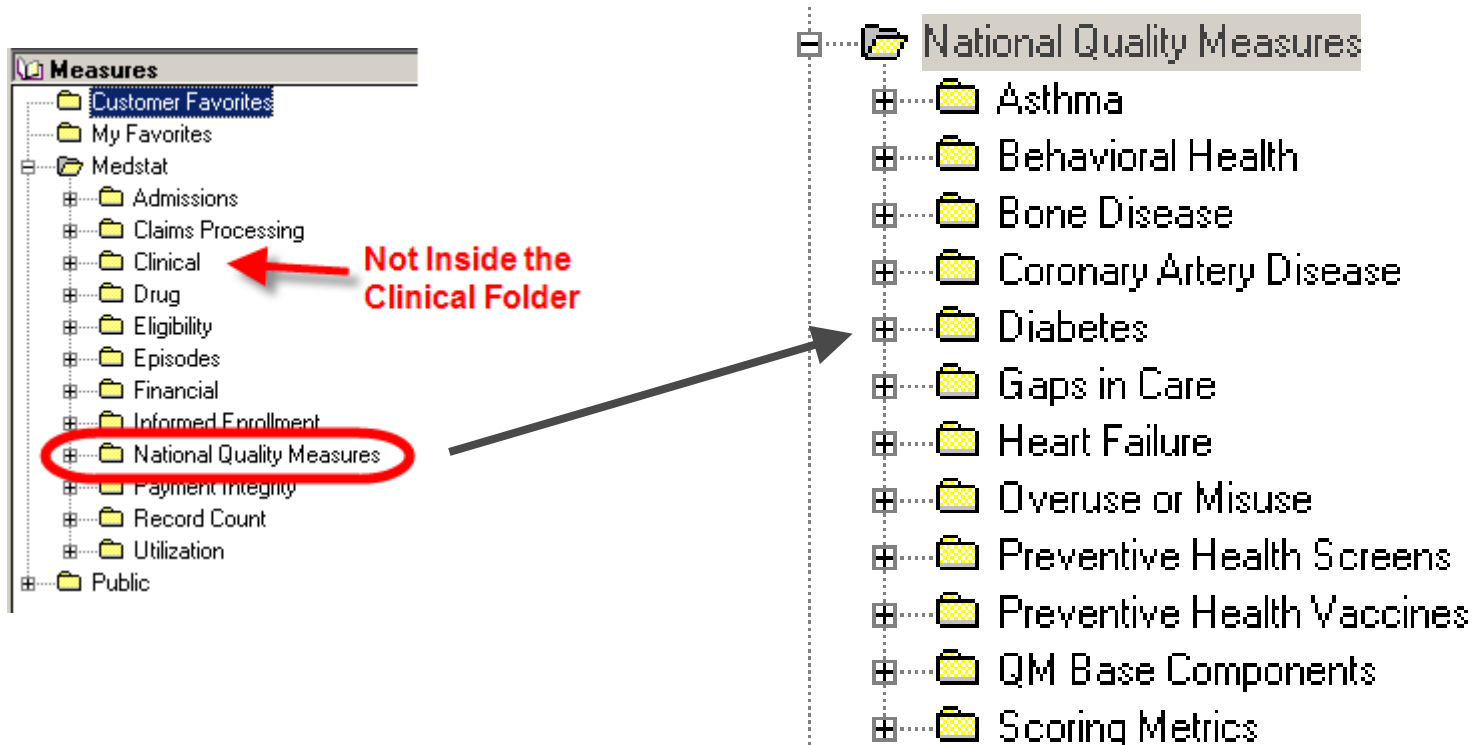
# ADVANTAGE EXTENSIONS TO QUALITY MEASURES

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- When was the most recent occurrence of the desired procedure
  - Used for patient management
- Which physician should be accountable for the care of this patient for this disease
  - Quality measures as adopted by NQF do not specify attribution to physicians
  - Key to provider profiling

# NATIONAL QUALITY MEASURES FOLDER

- Organized by Disease Condition



# NATIONALLY ENDORSED\* QUALITY MEASURES

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## Coronary Artery Disease

- Drug Therapy for Lowering LDL Cholesterol
- Beta-Blocker Treatment after a Heart Attack
- Beta-Blocker Therapy Post-MI
- Cholesterol Screen
- Lipid Profile
- Antiplatelet Therapy
- Beta-Blocker Therapy Prior-MI
- ACEI/ARB Therapy

## Heart Failure

- ACEI/ARB Therapy
- LVEF Assessment
- Beta-Blocker Therapy
- Warfarin Therapy Patients with Atrial Fibrillation

## Asthma

- Use of Appropriate Medications for People with Asthma

## Diabetes

- HbA1C Management
- Lipid Measurement
- Eye Exam
- Microalbumin Test for Nephropathy

## Behavioral Health

- Antidepressant Medication Management - Acute Phase
- Antidepressant Medication Management - Continuation Phase
- Optimal Practitioner Contacts for Medication Management

## Misuse/Overuse

- Appropriate Treatment for Children with Upper Respiratory Infection (URI)
- Appropriate Testing for Children with Pharyngitis

## Bone Disease

- Osteoporosis Management in Women who have had a Fracture

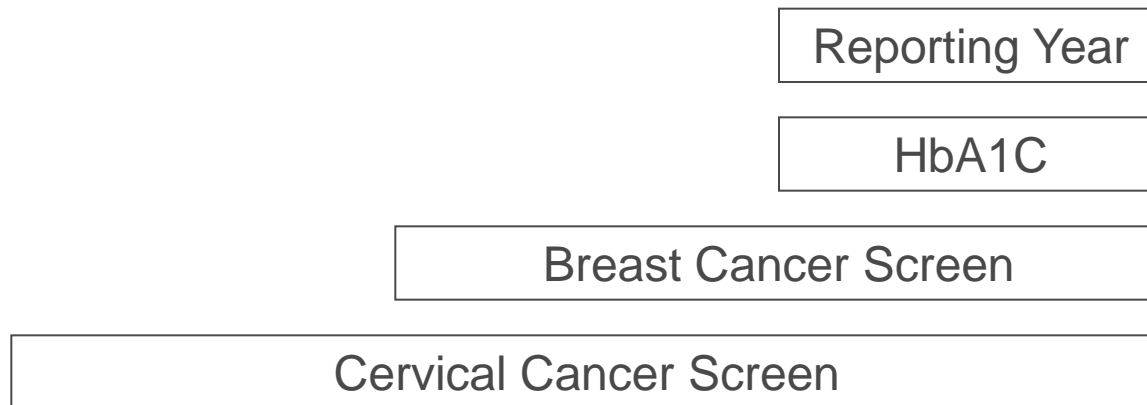
## Preventive

- Breast Cancer Screening
- Colorectal Cancer Screening
- Cervical Cancer Screening
- Influenza Vaccination
- Pneumonia Vaccination
- Childhood Immunization Status

# RULES MEASURES ARE AS OF END OF PERIOD

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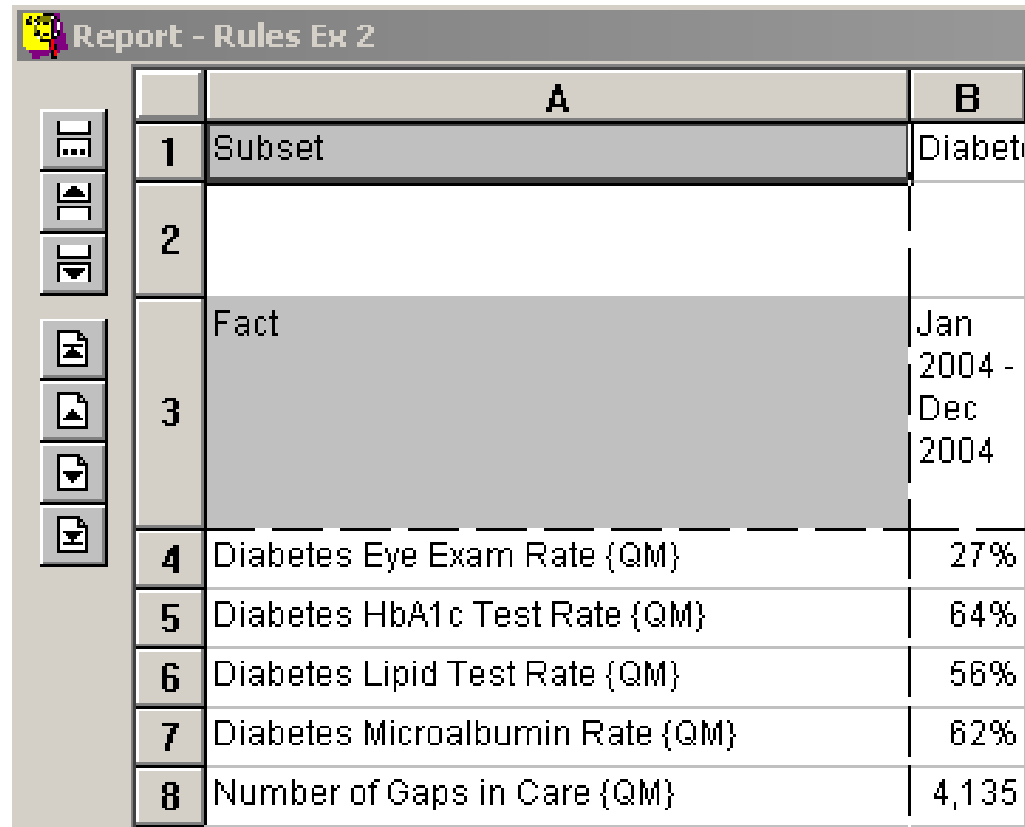
- What is the state of this patient at the end of the time period
- Look back from end of period for required period of time
  - Most measures are a year
  - Some are two or three years
- Patient must meet continuous enrollment for the measure period



# REPORTING IN ADVANTAGE – EXAMPLE REPORTS

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## Report using quality measure rates



	A	B
1	Subset	Diabet
2		
3	Fact	Jan 2004 - Dec 2004
4	Diabetes Eye Exam Rate {QM}	27%
5	Diabetes HbA1c Test Rate {QM}	64%
6	Diabetes Lipid Test Rate {QM}	56%
7	Diabetes Microalbumin Rate {QM}	62%
8	Number of Gaps in Care {QM}	4,135

# REPORTING IN ADVANTAGE – EXAMPLE REPORTS

Medstat Decision Analyst

File Edit View Report Format Tools Window Help

	A	B	C	D	E
1	Subset	All Data			
2	Time Period	Jan 2004 - Dec 2004			
3					
4	Rule Measure	Quality Measure Base Numerator {QM}	Quality Measure Base Denominator {QM}	Quality Measure Base Rate {QM}	Number of Gaps in Care {QM}
5	Asthma Medication Management	298	347	86%	49
6	Breast Cancer Screen	7,387	12,186	61%	4,799
7	CAD ACE Inhibitor/ARB Therapy	218	379	58%	161
8	CAD Antiplatelet Therapy	134	570	24%	436
9	CAD Beta Blocker Therapy 6 Months Post MI	21	34	62%	13
10	CAD Beta Blocker Therapy 7 Days Post MI	20	31	65%	11
11	CAD Beta Blocker Therapy Prior MI	96	127	76%	31
12	CAD Event Cholesterol Test	422	654	65%	232
13	CAD LDL Lowering Drug Therapy	449	570	79%	121
14	CAD Lipid Test	383	570	67%	187
15	Chicken Pox (VZV) Vaccine	480	690	70%	210
16	Colorectal Cancer Screen	4,801	15,281	31%	10,480
17	Depression Acute Phase Therapy	196	280	70%	84
18	Depression Continuation Phase Therapy	145	280	52%	135
19	Depression Optimal Practitioner Visits	0	280	0%	280
20	Diabetes Eye Exam	596	2,170	27%	1,574
21	Diabetes HbA1c Test	1,394	2,170	64%	776
22	Diabetes Lipid Test	1,220	2,170	56%	950
23	Diabetes Microalbumin Test for Nephropathy	1,335	2,170	62%	835

# GAPS MEASURES IGNORE CONTINUOUS ENROLLMENT

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- For Quality Measurement {QM} it is important to see all claims for the target time period
  - Did the numerator event not happen...
  - Or do we just not see it
- Gaps in Care is for reminding patients (or doctors) to get recommended care
  - If we can't see it, we'll still recommend it
  - Provides most recent date as a management tool

# PATIENT HEALTH RECORD – GAPS IN CARE ALERTS

- Available on the Patient Summary tab
- Identifies services that are missing or overdue for a patient according to nationally endorsed evidence-based guidelines
- Information detailed includes the service, date when the service was last rendered, and the status (i.e. missing, or overdue)

**THOMSON MEDSTAT ADVANTAGE SUITE** BETTER INFORMATION. BETTER RESULTS.

Home Patient List Export To PDF Help Select Application Sign Out

**Patient Health Record**

Patient Summary Recommended Care Episodes of Care Details

Person ID: 026987701

**Patient Demographics**

Gender:	Male	Age In Years:	70	Plan Type Medstat:	Indemnity (FFS)
Plan:	Blue Health Plus	PCP Name:	~Missing		

**Cost and Utilization Summary (Services Paid Jul 2002-Jun 2003)**

Cost Summary	Allowed Amount	Top Drugs	Days Supply	ER Summary
Place Group		Product Name		Service
Outpatient	\$675	HYZAAR	360	Diagnosis 3
~Missing	\$2,555	ZOCOR	330	No Data Available
TOTAL	\$3,230	CLARITIN-D	210	
		DEPO-TESTOSTERONE	94	
		ASCENSIA ELITE BLOOD TEST STRIPS	50	
		CHLORHEXIDINE GLUCONATE	16	

Projected Future Costs  
\$2,500 to \$5,000 per year  
Estimate based on age, gender and chronic conditions.

**Recent Utilization (Services Incurred Jul 2002-Jun 2003)**

Outpatient: [Bar chart showing utilization from Jul to Jun]

~Missing: [Bar chart showing utilization from Jul to Jun]

**Clinical Summary (Services Paid Jul 2002-Jun 2003)**

Clinical Condition	Allowed Amount
Diabetes	\$281
Infec/Inflam - Skin/Subcu Tiss	\$124
Cancer - Prostate	\$103
Hypertension, Essential	\$88
Endocrine Disorders, NEC	\$79

**Gaps in Care Alerts**

Condition	Service	Last Event Date	Status
Diabetes	Eye Exam	02/13/2002	Overdue
Diabetes	HbA1c Test		Missing
Diabetes	Lipid Test		Missing
Preventive Health Screens	Colorectal Cancer Screen		Missing
Preventive Health Vaccines	Flu Vaccine		Missing
Preventive Health Vaccines	Pneumonia Vaccine		Missing

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# PATIENT HEALTH RECORD - RECOMMENDED CARE

- Separate tab which provides a summary of all recommended services according to nationally endorsed evidence-based guidelines
- Section for Preventive Services (e.g., influenza vaccine, colonoscopy, etc.)
- Section for Disease Specific Services (e.g., Diabetes - eye exam, urine protein test, HbA1c testing for diet compliance)
- Information detailed includes the service, frequency for how often the service should occur, date when the service was last rendered, and the status (i.e. missing, or overdue)

The screenshot displays the Thomson Medstat Advantage Suite interface for a patient's health record. The top navigation bar includes links for Home, Patient List, Export To PDF, Help, Disease and Drug Reference, Select Application, and Sign Out. The main header identifies the system as 'MEDSTAT ADVANTAGE SUITE' with the tagline 'BETTER INFORMATION. BETTER RESULTS.' The patient's health record is shown with tabs for Patient Summary, Recommended Care (selected), Episodes of Care, and Details. The patient ID is 026987701. Demographics include Male, Blue Health Plus plan, Age 70, and PCP Name ~Missing. The Preventive Services section shows a table with 3 rows of services, all with a status of 'Missing'. The Disease Specific Services section shows a table with 4 rows of services, with statuses including 'Overdue' and 'Up-to-date'. Copyright information at the bottom indicates 2007 Thomson Medstat.

**Preventive Services**

Service	Frequency	Status	Last Event Date
Colorectal Cancer Screen	Once every 1-5 yrs (test dependent)	Missing	
Flu Vaccine	Once per year	Missing	
Pneumonia Vaccine	Once every 5 years	Missing	

**Disease Specific Services**

Condition	Service	Frequency	Status	Last Event Date
Diabetes	Eye Exam	At least once per year	Overdue	2/13/2002
Diabetes	HbA1c Test	At least once per year	Missing	
Diabetes	Lipid Test	At least once per year	Missing	
Diabetes	Microalbumin Test	At least once per year	Up-to-date	3/28/2003

# QUESTIONS?

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