# CEDR and Quality: What's on the Dashboard and Under the Hood?

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Objectives

- 1.Present a brief history of CEDR initiative birth and growth

- 2. Understand current practical uses of CEDR for quality reporting and reimbursement.

- 3. Understand future uses for CEDR to support quality improvement of ED clinical practice and outcomes.
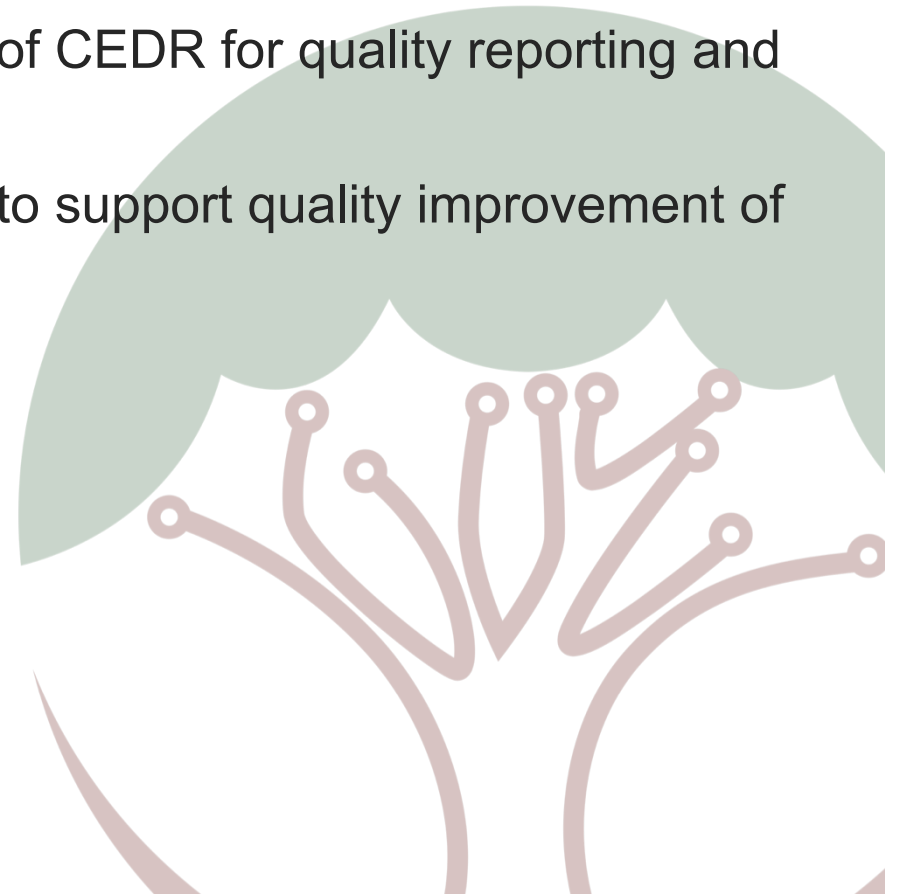
Contents

- Revenue Impact of MACRA

- MIPS Overview

- What is CEDR - Clinical Emergency Data Registry?

- Advantages of participating in CEDR

- CEDR Technical Implementation

- Physician Dashboard

- CEDR Measures

- CEDR Security & HIPAA Features

- How to Participate
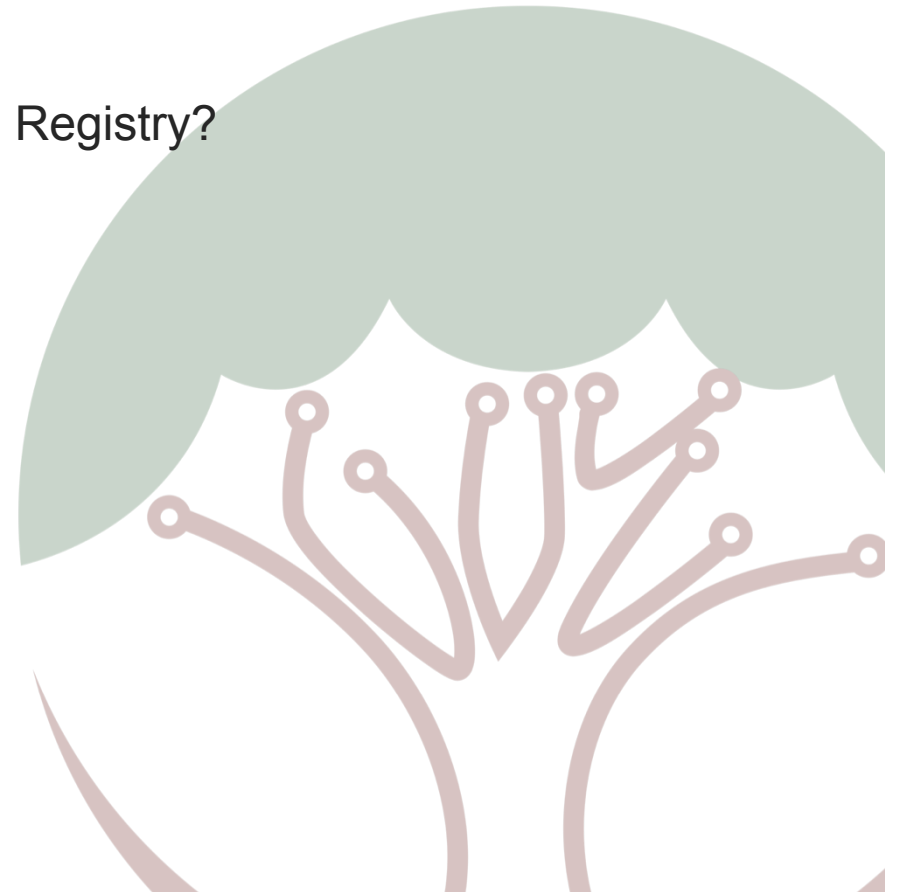
Glossary

- ACEP – American College of Emergency Physicians
- ACI – Advancing Care Information
- APMs – Alternate Payment Models
- CEDR – Clinical Emergency Data Registry
- CHIP – Child Health Insurance Program
- CMS - Centers for Medicare and Medicaid Services
- ED – Emergency Department
- EM – Emergency Medicine
- IA – Improvement Activity
- IT – Information Technology
- MACRA – Medicare Access and CHIP Reauthorization Act
- MIPS – Merit-based Incentive Payment System
- QCDR – Quality Clinical Data Registry
- QPP - Quality Payment Program

MACRA and MIPS

Medicare Access and CHIP Reauthorization Act (MACRA)

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) is a **bipartisan legislation signed into law on April 16, 2015.**

MACRA created the **Quality Payment Program** that:

- Repeals the [Sustainable Growth Rate](#) formula

- Changes the way that Medicare rewards clinicians for value over volume

- Streamlines multiple quality programs under the new Merit Based Incentive Payments System (MIPS)

- Gives bonus payments for participation in eligible alternative payment models (APMs)

What's the Quality Payment Program (QPP)?

The Quality Payment Program improves Medicare by helping you focus on care quality and the one thing that matters most — making patients healthier.

The Quality Payment Program has two tracks you can choose:

- Advanced Alternative Payment Models (APMs) or
- The Merit-based Incentive Payment System (MIPS)

Who is in QPP 2018?

You're a part of the Quality Payment Program in 2018 if you are in an Advanced APM or if you bill Medicare more than $90,000 in Part B allowed charges a year *and* provide care for more than 200 Medicare patients a year.

https://qpp.cms.gov/

What's the MIPS?

Why MIPS? - If you decide to participate in the Merit-based Incentive Payment System (MIPS), you will earn a performance-based payment adjustment to your Medicare payment.

How Does MIPS Work? - You earn a payment adjustment based on evidence-based and practice-specific quality data. You show you provided high quality, efficient care supported by technology by sending in information in the four categories.

MIPS Participation Status - To check if you need to submit data to MIPS, enter your 10-digit National Provider Identifier (NPI) number.

https://qpp.cms.gov/participation-lookup

2018 Performance Period Revenue Impact

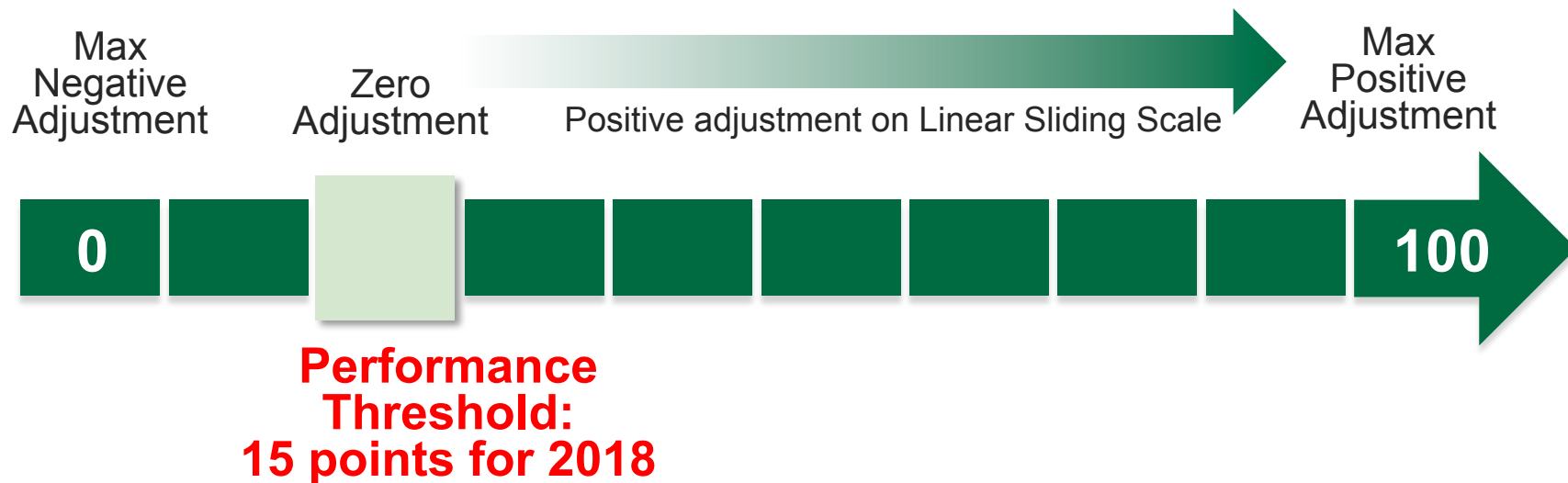| Total Impact of Participation	
	2018 Performance Year for the 2020 Payment Adjustment Under MIPS
QPP/MIPS Penalties For Failure to Report	**+/- 5.0%** For positive adjustments, the Secretary may increase/decrease the adjustment factor by a scaling factor of up to 3.0 in order to ensure budget neutrality. **Additional exceptional performance bonus: 0.5% - 10%** Total amount allocated for exceptional bonus in a given year shall not exceed $500,000,000

MIPS and APMs begin operating

	2016	2017	2018	2019	2020	2021	2022
Fee updates	0.5%	0.5%	0.5%	0.5%	0%	0%	0%

Annual fee updates as of 2026 0.25% MIPS 0.75% APMs ▶

Doctors treating Medicare beneficiaries will be in one of two newly designed payment paths

MIPS* (Merit-Based Incentive Payment System)

Doctors will be graded on four factors...

- Clinical practice improvement activities 15%
- Quality of care 30%
- Meaningful use of EHRs 25%
- Resource use 30%

... to determine bonuses or penalties

MIPS MAXIMUM BONUS OR PENALTY (+/-)

	2019	2020	2021	2022
↑	4%	5%	7%	9%
↓	-4%	-5%	7%	-9%

(+/- 9% continues after 2022) ▶

APMs (Alternative payment models)

APMs ACROSS-THE-BOARD BONUS

	2019	2020	2021	2022
	5%	5%	5%	5%

(5% bonus stops after 2024) ▶

Additional funding

$15 million available every year for measure development

$20 million available every year for technical assistance to small practices

Up to $500 million authorized every year for MIPS bonuses of up to 10% for exceptional performance (2019–24)

Health Policy Brief: Medicare's New Physician Payment System, *Health Affairs*, April 21. 2016

Translating MIPS Total Composite Score Points into Payment Adjustments

Max Negative Adjustment

Zero Adjustment

Positive adjustment on Linear Sliding Scale

Max Positive Adjustment

0

100

Performance Threshold:
15 points for 2018

MIPS: Final Composite Score Translation to Payment Update

Final MIPS Composite Score	Level of Participation	Payment Adjustment
≥ 70 points	▸ Full reporting across all eligible MIPS performance categories	▸ Positive adjustment ▸ Eligible for additional exceptional performance bonus: ▸ 70 points = 0.5% → 100 points = 10%
16-69 points	▸ Report 6 or more Quality measure; and ▸ Attest to 2 high or 4 medium Improvement Activity; and/or ▸ Report "more than required" ACI measures	▸ Positive adjustment ▸ Not eligible for exceptional performance bonus
15 points	▸ Report up to 6 Quality measure; and ▸ Attest to up to 4 Improvement Activity; and/or ▸ Report "more than required" ACI measures	▸ Avoid penalty; neutral payment adjustment
0 points	▸ Submit nothing	▸ Negative payment adjustment of -5%

Performance Matters!

- Measure performance will be posted publicly on Physicians Compare
  - Measures in their first year will not be posted
  - Measures that have less than 20 reported patients will not be posted
- There will be a 30 day preview period before scores are posted for clinicians to review and contest their Physicians Compare profile.

CEDR

What is CEDR (Clinical Emergency Data Registry)?

- Qualified Clinical Data Registry (designated by CMS)

- Designed to measure healthcare quality, outcomes, practice patterns and trends in emergency care

- Developed by ACEP to enable emergency physicians to participate in MACRA, promote the highest quality of emergency care, and demonstrate the value of emergency care

- First and only emergency medicine specialty registry at a national level

- Enables participants to submit quality data to meet MACRA quality improvement and regulatory requirements

- Will also facilitate emergency care research through the identification of practice patterns, trends and outcomes in emergency care

Advantages of participating in CEDR

- **Revenue**
  - ▸ Protect your revenue: avoid negative -5% payment penalty for 2018 year
  - ▸ Enhance your Medicare revenue through bonus incentive (up to 9%)
  - ▸ Potential increased revenue from private payers

- **Quality reporting**
  - ▸ Physicians can get Quality/QPP credit for reporting more meaningful measures
    - ▸ Measures created by emergency physicians for emergency physicians
  - ▸ Participation can cover all of the quality measure reporting requirements
    - ▸ Quality, Improvement Activities, and ACI requirements are met
    - ▸ Joint Commission Ongoing Professional Practice Evaluation (OPPE) and Focused Professional Practice Evaluation (FPPE) processes compliance

Advantages of participating in CEDR

- **Accountability**
  - Movement to electronic registries is more accurate, secure and cost-effective
  - CEDR allows an accountable way to back up data provided to CMS
  - CEDR enables hospitals to track and improve eMeasures

- **Meaningful Use: Advancing Clinical Information (ACI)**
  - Groups may receive credit under the Advance Clinical Information portion of MIPS for reporting via specialized registry

- **Physician Maintenance of Certification**
  - Maintenance of Certification Part IV activities (in conjunction with an American Board of Emergency Medicine approved MOC program)
  - Qualified for one medium-weight IA

CEDR Quality Measures

CEDR Quality Measures 2018

2 Types of Measures

- Quality Payment Program (QPP) Measures - Out of CMS 271 published measures – 24 are reportable via CEDR
- Every QCDR is allowed to build 30 measures of its own that are specialty specific
  - ‣ CEDR has 24 registry specific 2018 reportable measures

- Allows for reporting across all payers - not just Medicare

2018 Quality Payment Program (QPP) Measures

Measure ID	2017 Measure	Measure Title	Type	High Priority	Benchmark
QPP 66	Yes	Appropriate testing for children with pharyngitis	Process	Yes	Yes
QPP 76	Yes	Prevention of Catheter Related Bloodstream Infections (CRBSI): Central Venous Catheter (CVC) Insertion Protocol	Process	Yes	Yes
QPP 91	Yes	Acute Otitis Externa (AOE): Topical Therapy	Process	Yes	yes
QPP 93	Yes	Acute Otitis Externa (AOE): Systemic Antimicrobial Therapy – Avoidance of Inappropriate Use	Process	Yes	Yes
QPP 107	No	Adult Major Depressive Disorder (MDD): Suicide Risk Assessment	Process	No	Yes
QPP 116	Yes	Antibiotic treatment for adults with acute bronchitis: avoidance of inappropriate use	Process	Yes	Yes
QPP 187	Yes	Stroke and Stroke Rehabilitation: Thrombolytic Therapy (tPA)	Process	No	Yes
QPP 226	No	Preventative Care and Screening: Tobacco Use: Screening and Cessation Intervention	Process	No	Yes
QPP 254	Yes	Ultrasound Determination of Pregnancy Location for Pregnant Patients with Abdominal Pain	Process	No	Yes
QPP 255	Yes	Rh Immunoglobulin (Rhogam) for Rh-negative Pregnant Women at Risk of Fetal Blood Exposure	Process	No	No
QPP 317	Yes	Preventative Care and Screening: Screening for High Blood Pressure and Follow Up Documented	Process	No	Yes
QPP 326	Yes	Atrial Fibrillation and Atrial Flutter: Chronic Anti coagulation Therapy; also known as hospital STK3	Process	No	Yes
QPP 331	No	Adult Sinusitis: Antibiotic Prescribed for Acute Sinusitis (Overuse)	Process	Yes	Yes
QPP 332	No	Adult Sinusitis: Appropriate Choice of Antibiotic: Amoxicillin With or Without Clavulanate Prescribed for Patient with Acute Bacterial Sinusitis (Appropriate Use)	Process	Yes	Yes
QPP 333	No	Adult Sinusitis: Computerized Tomography for Acute Sinusitis (Overuse)	Efficiency	Yes	Yes
QPP 402	No	Tobacco Use and Help with Quitting Among Adolescents	Process	No	Yes
QPP 415	Yes	ED Utilization of CT for Minor Blunt Head Trauma for Patients Ages 18+ Years	Process	Yes	Yes
QPP 416	Yes	ED Utilization of CT for Minor Blunt Head Trauma for Patients Ages 2-17 Years	Process	Yes	No
QPP 419	Yes	Overuse Of Neuroimaging For Patients With Primary Headache And A Normal Neurological Examination Claims	Process	Yes	Yes
QPP 431	No	Preventative Care and Screening: Unhealthy Alcohol Use: Screening & Brief Counseling	Process	No	Yes

2018 ACEP QCDR Measures

Measure ID	2017 Measure	Measure Title	Type	High Priority	Benchmark
ACEP 19	Yes	Emergency Department Utilization of CT for Minor Blunt Head Trauma for Patients Aged 18 Years and Older	Process	No	No
ACEP 20	Yes	Emergency Department Utilization of CT for Minor Blunt Head Trauma for Patients Aged 2 Through 17 Years	Process	No	No
ACEP 21	Yes	Coagulation Studies in Patients Presenting with Chest Pain with No Coagulopathy or Bleeding	Process	No	Yes
ACEP 22	Yes	Appropriate Emergency Department Utilization of CT for Pulmonary Embolism	Process	No	Yes
ACEP 24	Yes	Pregnancy Test for Female Abdominal Pain Patients	Process	No	Yes
ACEP 25	Yes	Tobacco Screening and Cessation Intervention	Process	No	Yes
ACEP 29	Yes	Sepsis Management: Septic Shock: Repeat Lactate Level	Outcome	No	No
ACEP 30	Yes	Sepsis Management: Septic Shock: Lactate Clearance Rate >10%	Process	No	No
ACEP 31	Yes	Emergency Medicine: Appropriate Foley Catheter Use in the Emergency Department	Process	No	No
ACEP 32-39	Yes	ED Median Time from ED arrival to ED departure for discharged ED patients for Adult Patients *(seven measures stratified by ED volume)*	Outcome	No	No
ACEP 40-47	Yes	ED Median Time from ED arrival to ED departure for discharged ED patients for Pediatric Patients *(seven measures stratified by ED volume)*	Outcome	No	No
ACEP 48	No	Sepsis Management: Septic Shock: Lactate Level Measurement, Antibiotics Ordered, and Fluid Resuscitation	Process	No	No

Most commonly reported measures by ED Group - Top 10 Measures

Measure ID	Measure Title	Use Frequency
QPP 116	Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	60%
ACEP 32	ED Median Time from ED arrival to ED departure for discharged ED patients for Adult Patients	53%
QPP 93	Acute Otitis Externa (AOE): Systemic Antimicrobial Therapy Avoidance of Inappropriate Use	53%
QPP 187	Stroke and Stroke Rehabilitation: Thrombolytic Therapy (tPA)	40%
QPP 54	Emergency Medicine: 12-Lead Electrocardiogram (ECG) Performed for Non-Traumatic Chest Pain	40%
ACEP 40	ED Median Time from ED arrival to ED departure for discharged ED patients for Pediatric Patients	40%
ACEP 21	Coagulation Studies in Patients Presenting with Chest Pain with No Coagulopathy or Bleeding	40%
QPP 254	Ultrasound Determination of Pregnancy Location for Pregnant Patients with Abdominal Pain	35%
ACEP 23	Anti-coagulation for Acute Pulmonary Embolism Patients	35%
ACEP 24	Pregnancy Test for Female Abdominal Pain Patients	30%

CEDR Implementation Data Mapping

Data Sources

Common Sources

- Revenue Cycle Management (RCM) Systems

- Emergency Department Information System (EDIS)

- Data Warehouse

- EHR

- Reporting Database

Multiple Data Sources

- Many implementations require more than one data source.

- CEDR merges records from multiple data sources via a unique patient and encounter identifier.

CEDR Technical Implementation – Get the Data

- Choose data collection method

    ▸ PULL: Usually 12-14 weeks

    ▸ PUSH: A minimum of 16-20 weeks using standard data file format :

        ▸ – Preferred CCDA/HL-7

        ▸ Acceptable - .xml, flat file, .xls/.xlsx

        ▸ Not acceptable – PDF, Scanned Images

    * The time it takes to complete the Push methodology varies significantly across hospitals, depending on the format and quality of the data, the amount of ED IT resources, and the level of engagement of the participating ED staff

- CEDR collects structured and unstructured data

- Natural language processing software is used to read unstructured data

- CEDR team will work with ED IT team to collect data

- ED Clinical Lead will ensure accurate data mapping and measures calculation
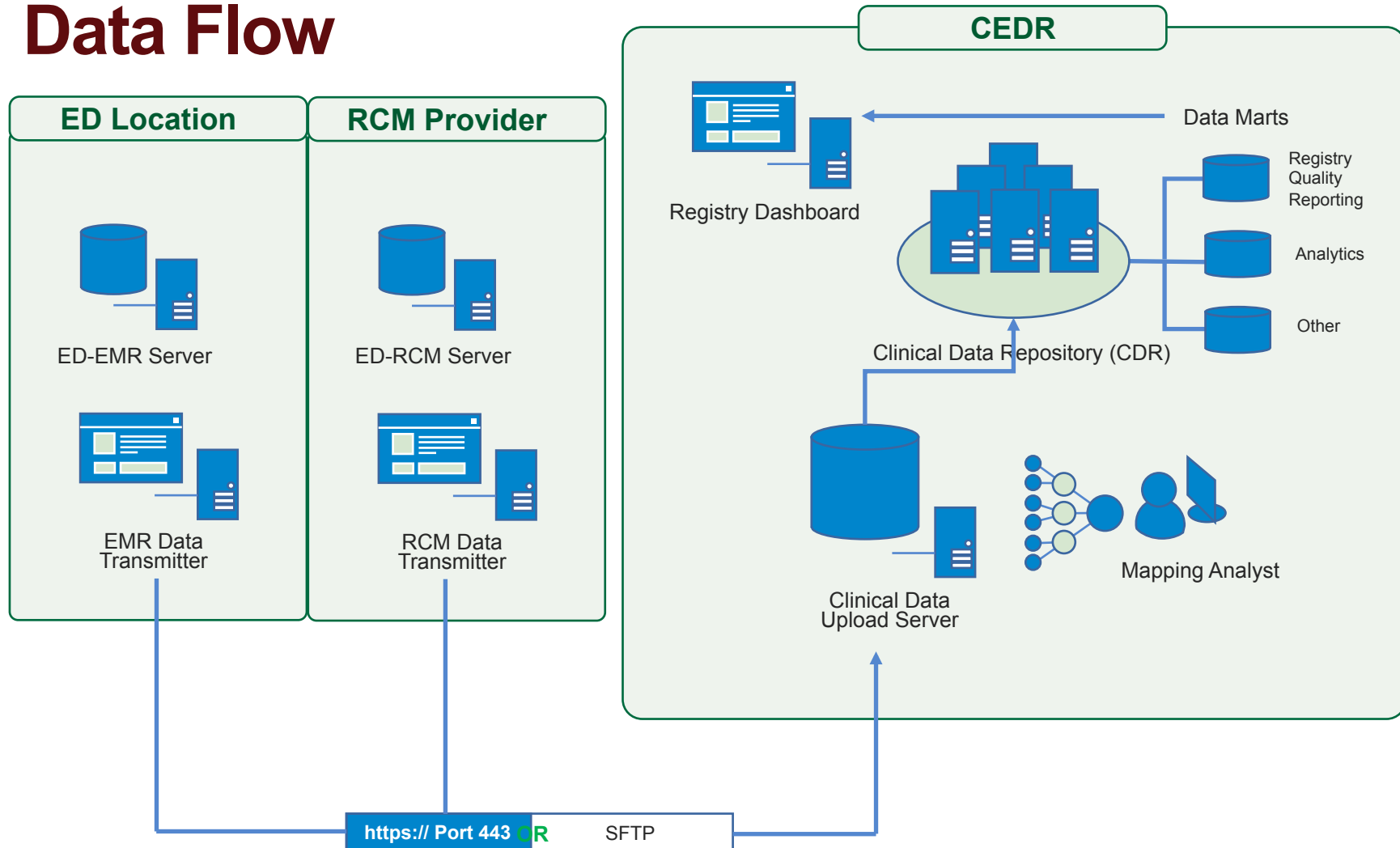
EMRs/Data Systems that CEDR has worked with

- EPIC

- Cerner

- Meditech

- Allscripts

- PICIS

- Merge Financials

- Wellsoft

- T-system

- MEDHOST EDIS

- Paragon WebStation

- Soarian EDIS

- Medpoint

- Forerun

CEDR Hosting

- Amazon Web Services (AWS) Cloud environment is SSAE-16, PCI-DSS, FISMA, ISO 27001, SOC-I, II, III certified.

- Access to FIGmd Corporate Headquarters is controlled by video monitoring, Biometric scan systems at each door, visitor registration, and badge access.

- FIGmd, Inc. has designed HIPAA and Security Awareness Training Program for entire workforce.

- Limit uses & disclosures of PHI to the "minimum necessary"

- Internal Audits and Security reviews on going basis.

- All required policies and procedures are created and controls are in place.

CEDR HIPAA & Security Features

- CEDR standards exceed industry standards for data security and management

- All data is handled in accordance with HIPAA requirements

- Data is encrypted while in motion and at rest

- Stringent security policies exceeding industry standard
  - ▶ Registry staff can only access data in a clean environment
  - ▶ Physical restrictions regarding usage of smart phones in work areas
  - ▶ Portable drives are banned
  - ▶ Restricted access to public e-mail systems

CEDR Technical Output

- Groups will be given access to their dashboard to view their data

- Groups/EDs can query their data and generate reports

- Groups/EDs can view performance across measures for multiple locations and providers

- Dashboard is accessible via an ACEP login

- Physicians can view their individual performances and determine which measures they want to report

- Administrators/ED Directors can view group level performances

CEDR Dashboard – Measure View

CEDR Dashboard – Measure Detail

Who We Have Worked With

	2016	2017	2018
Number of Providers	2,143	10,000+	15,000+
Number of Patient Visits	3M +	15M +	25M +
Number of ED Engaged	70	800+	1200+
Number of EMR/EDIS	14	14	14
Performance Measures	42	42	46

How to Participate in CEDR?

Get started:
- Complete interest form
- Complete detailed application
- Sign agreements for Practice Group, Billing Company, and Hospital

Cost

- **Direct costs**:
  - ▸ $0.25/ visit for 2018 reporting year, where the physician group is reporting on behalf of their physicians, the physician group incurs this cost, not the hospital
  - ▸ Several discounts apply on base price of $0.25
  - ▸ $100 CEDR Annual User Fee - waived for ACEP/SEMPA members and 100% Club groups.

- **Indirect costs:**
  - ▸ depends on the data transfer method chosen by the ED. The ED may need to devote IT resources to staff the CEDR project, particularly using the push method. This may incur additional costs, depending on resource levels and data volume.

Cost- Discounts offered on the base price

- **Membership**:
  - ‣ Individual Member = 10% (ACEP or SEMPA)
  - ‣ 100% Club member = 20% (ACEP and SEMPA)
- **Technology (Pull or Data Ware House or RCM): = 10%**
- **Multi- year Contracts =** 5% to 10% (3 years contract = 5%, 5 years contract = 10%)
- **Visit Volume**
  - ‣ 1 million+ = 10 %
  - ‣ 5 Million+ = 20%
- **Rural/Critical Access Hospital = 10 %**

2018 CEDR Timeline – Full Implementation

February 28th, 2018	**Complete Interest Form**
March 15th, 2018	**Complete Detailed Application**
March 31st, 2018	**Complete all Contracting**
April 30th, 2018	**Submit required Data**
June 30th, 2018	**Resolve Data Quality Issues**
July through December 2018	**Review Quality Scores & Sign Release Form**
March 31st, 2019	**Deadline for CMS Data Submission**

2018 CEDR Timeline - Billing Data Only

March 31st, 2018	**Complete Interest Form**
April 30th, 2018	**Complete Detailed Application**
May 31st, 2018	**Complete all Contracting**
June 30th, 2018	**Submit required Data**
July 31st, 2018	**Resolve Data Quality Issues**
July through December 2018	**Review Quality Scores & Sign Release Form**
March 31st, 2019	**Deadline for CMS Data Submission**

2018 CEDR Timeline – Improvement Activities (ONLY) based MIPS reporting

May 31st, 2018	**Complete Interest Form**
June 30th, 2018	**Complete Detailed Application**
July 31st, 2018	**Complete all Contracting**
August 31st, 2018	**Select Improvement Activities (IAs) for 90 days**
December 31, 2018	**Complete selected IA activities**
January 2019	**Attest to IAs & Sign Release Form**
March 31st, 2019	**Deadline for CMS Data Submission**

Stay Connected

ACEP offers CEDR webinars every other month with free CME:

Next webinar on Tuesday March 13th at 2pm ET/1pm CT

Please register for Reporting MIPS through CEDR at:

https://attendee.gotowebinar.com/register/3031422115054928641

In depth review of the steps and process involved using CEDR for Group or Individual 2018 MIPS Reporting. Topics for this webinar will include selection of reportable measures, Advancing Care Information data entry, and Improvement Activity reporting through CEDR.

After registering, you will receive a confirmation email containing information about joining the webinar.

CEDR Specific Questions?

- *www.acep.org/cedr*
    - ‣ Frequently Asked Questions (FAQ)
    - ‣ Resources

- **Contact**
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