

## Problem

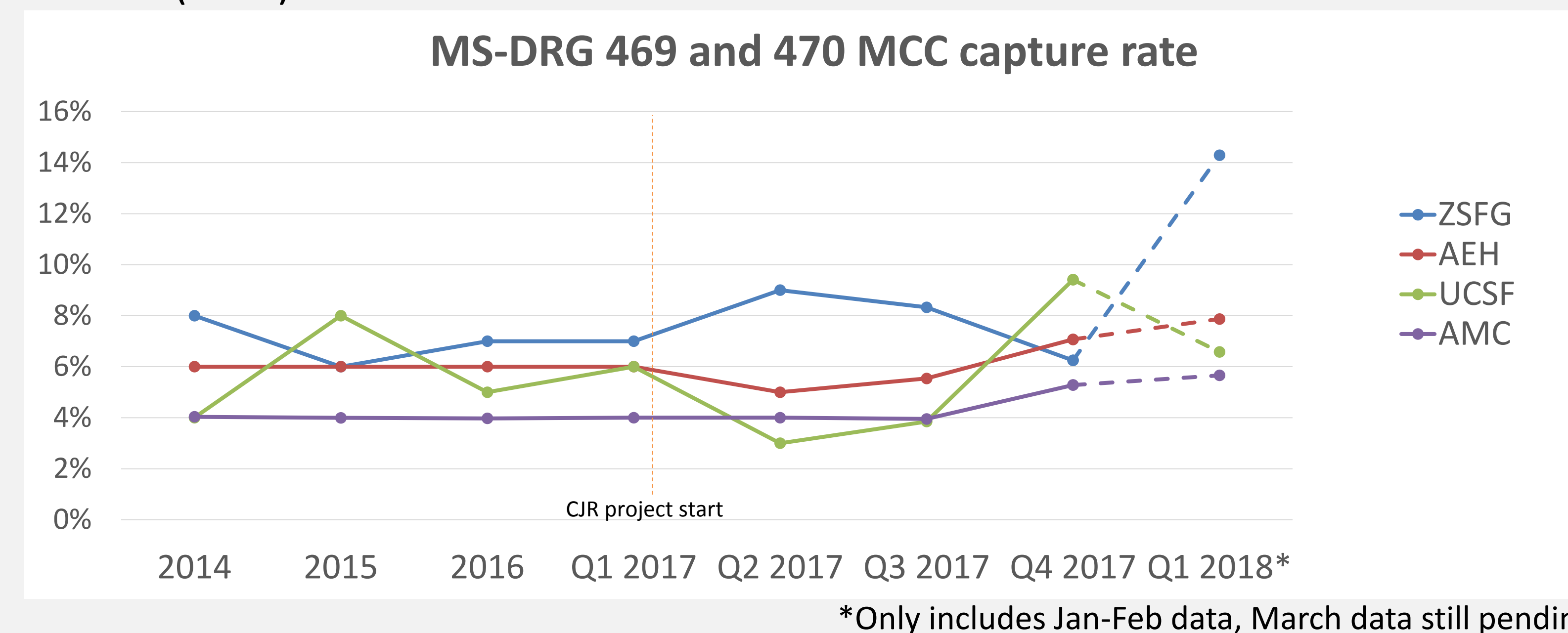
- In April 2016, CMS launched the first bundled payment program for joint replacements, the Comprehensive Joint Replacement (CJR) program which was designed to hold hospitals financially accountable for the quality and cost of the patient's procedure. This translated into shared financial risk for all points in the patients care continuum, including any time spent in a skilled nursing facility.
- When the Zuckerberg San Francisco General Hospital (ZSFG) Orthopedic department started participating in this bundled payment plan, they also realized that the approach had to be bundled. In sharing the work being done to streamline the admission and discharge of the CJR patients, the Clinical Documentation Integrity (CDI) team was asked to join in, analyze the documentation, and verify the data being generated.
- The ZSFG Clinical Documentation Integrity Program was established in 2012 and collaboratively tailors solutions for clinical services, emphasizing clinician education and providing feedback on documentation practices.

## Goals

- In response to the CJR program, the CDI team developed processes to ensure that clinician documentation appropriately reflects the severity of illness of our patient population and that coders are able to capture appropriate diagnoses.
- Given the expanding array of bundled payment models based on DRG type, we also wanted to design an agile set of interventions that could be leveraged in similar bundled payment models.

## Activities and Process

- DRGs 469 (Major Joint Replacement w/ MCC) and 470 (Major Joint Replacement w/o MCC) were pulled from Vizient, ZSFG's data repository, and compared to other hospitals as a percentage of capture.
- The ZSFG capture rate was compared to our university affiliate UCSF, other safety net hospitals through America's Essential Hospital (AEH), and academic medical centers (AMC).



- All secondary diagnoses were reviewed for specificity and opportunities for improvement identified.



### Top 20 Secondary Diagnoses

Diagnosis	Count	Diagnosis	Count
Hypertension	82	Asthma, uncomplicated	14
Hyperlipidemia	45	Primary osteoarthritis, bilat knees	14
Type 2 diabetes, uncomplicated	33	Anemia, nonspecific	14
Primary osteoarthritis, right knee	29	Hypothyroidism, nonspecific	14
Primary osteoarthritis, left knee	25	HTN w/ CKD stage 1-4	12
GERD without esophagitis	19	Primary osteoarthritis, left hip	12
Primary osteoarthritis, right hip	19	Acute blood loss anemia (CC)	11
Major depressive disorder	17	CKD, stage nonspecific	10
Chronic hepatitis C	17	Nicotine dependence	9
Obesity	15	COPD, nonspecific	9

- Opportunities for additional MCC capture were identified.

Current MCC Capture		Opportunities for MCC Capture		
Diagnosis	#	Diagnosis	Documentation	#
HIV disease	3	Type 2 DM	Specify if hyperosmolar coma present	33
ESRD	2	Chronic Hep C	Specify if hepatic coma present	17
Heart failure	2	Hypothyroidism	Specify if coma present	14
Pneumonia	2	Fracture	Specify if open	10
Sepsis	1	AKI/ ARF	Specify cause (ATN)	6
Coma	1	Hypoxemia	Specify if acute respiratory failure present	6

- Education for orthopedists and consulting hospitalists was delivered and note template changes were pursued to facilitate documentation.
- Concurrent reviews of elective joint replacements was prioritized and clinicians received ongoing performance feedback.

## Results

- DRG 469 capture rate was historically between 6-8% of all hip/knee joint replacement patients for 2014-2016 and after the launch of the CJR program and these interventions, the DRG 469 capture rate increased to 9% by Q2 2017.

## Challenges and Lessons Learned

- Each component of the CDI approach is vital and must be tailored for the service and patient population. This structured response is scalable and can be applied to any bundled payment program.
- As the fate of healthcare politics remains uncertain, the need for agile and bundled solutions remain. This model can work for any cohort of patients in which the bundled rate is set by DRG type.

