

Uncovering the True Patient Burden of Illness Using Artificial Intelligence (AI)

Presented By:

Chris Berg, RHIA, CCs, CCDS-O, *3M Consulting Services* – **3M M*Modal**

Kathy Harkness, RN, BSN, CCDS, *Client Engagement Manager* – **3M M*Modal**





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July 15, 2021 Meeting Notes: HCC Coding User Group #3
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22

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started by Marina Adamsky 14 days ago

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started by Ilene MacDonald 440 days ago

2

The impact of COVID-19 on Quality and Stars
started by Ilene MacDonald 489 days ago

12

ASK YOUR QUESTIONS IN OUR DISCUSSION BOARD

Today's speakers



Chris Berg

Chris Berg, RHIA, CCS, CCDS-O is an Outpatient Consultant with 3M HIS Consulting Services and has over 30 years of experience in Health Information Management, including outpatient coding, documentation integrity, and healthcare compliance. Her background includes positions as Emergency Department coder, Ambulatory Surgery coder and quality auditor, Clinical Information manager, and Outpatient Clinical Documentation Integrity manager. Chris also held a position as Adjunct Faculty member in the HIM program at Cuyahoga Community College in Cleveland, Ohio. As an Outpatient Consultant, she provides advisory services for outpatient CDI, clinical coding, and revenue cycle management to 3M clients.

Today's speakers



Kathy Harkness

Kathy Harkness is a graduate of Walden University with a Bachelor of Science in Nursing. Ms. Harkness has over 30+ years of professional experience in critical care, emergency medicine, cardiac surgery, nursing management, as well as CDI and Revenue Integrity. Currently she is working as a CDI technology subject matter expert with the 3M sales team providing operational insights around HCCs, CDI workflow and query management. Prior to starting with 3M M*Modal as a CDI Client Engagement Executive, she was a Clinical Director with The Advisory Board Company's Revenue Cycle Solutions Consulting and Management division. In this capacity, Ms. Harkness provided clinical documentation improvement expertise to the physician documentation data analysis process, as well as, leading over 200 one-on-one physician engagement meetings. She served as a subject matter expert for CDI assessments, education, and implementation of new programs across the country.

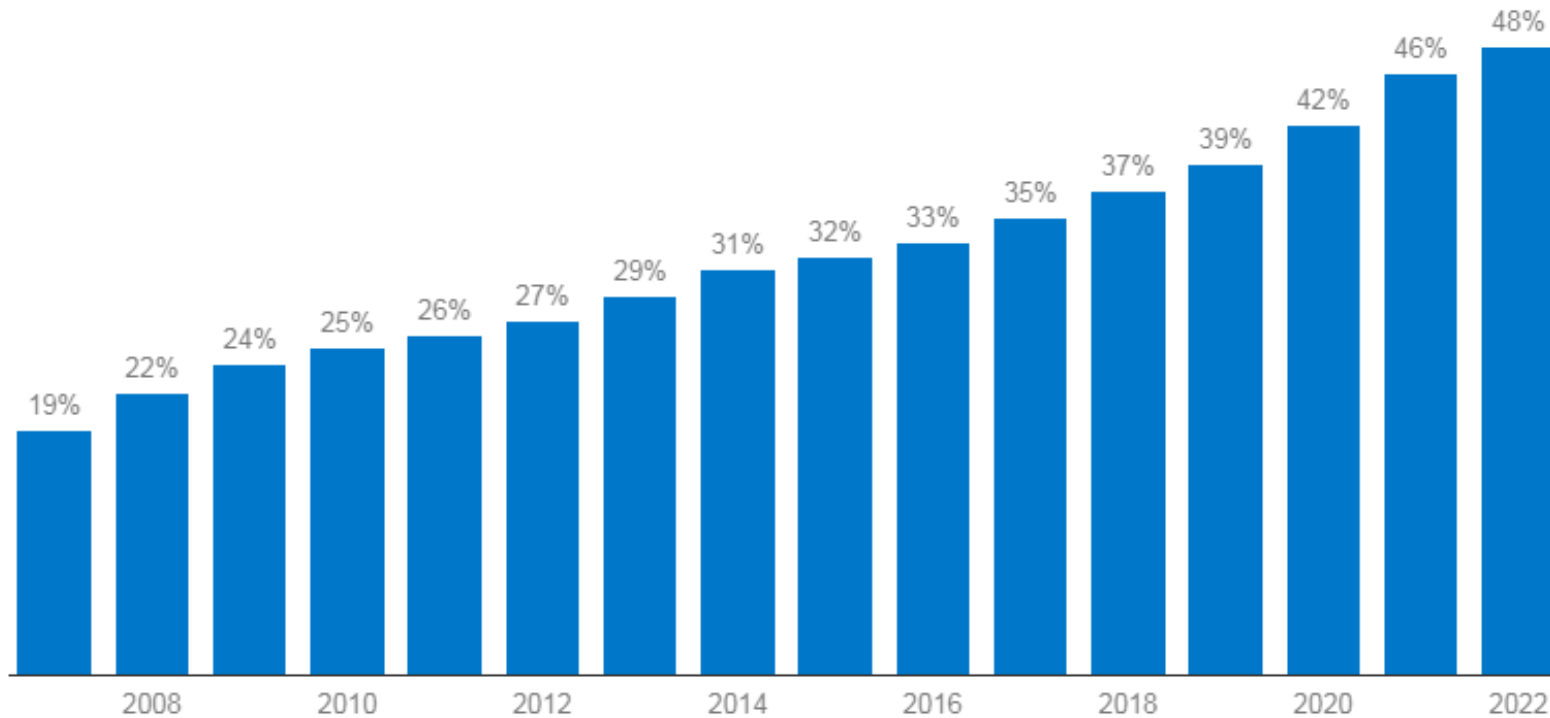
Polling questions

1. For what type of organization do you work?
 - Provider
 - Payer
 - Payvider (an organization combining providers with a payer, for example Geisinger Health System)
 - Healthcare organization
 - Consulting Firm
 - Healthcare IT vendor
 - Other
- 2. How are you currently tracking your HCCs?
 - EHR workflow
 - Post-review audit
 - Artificial Intelligence software
 - Outsourced consulting services
 - Other

Presentation objectives:

1. Capturing of patient burden of illness is essential for value-based care
2. Having accurate documentation is challenging and requires physician buy-in
3. Technology using natural language understanding (NLU) facilitates accurate documentation at scale
4. Use of technology and pro-active processes can deliver improved HCC capture

Total Medicare Advantage Enrollment, 2007-2022



Medicare Advantage makes up 48% of the Medicare population

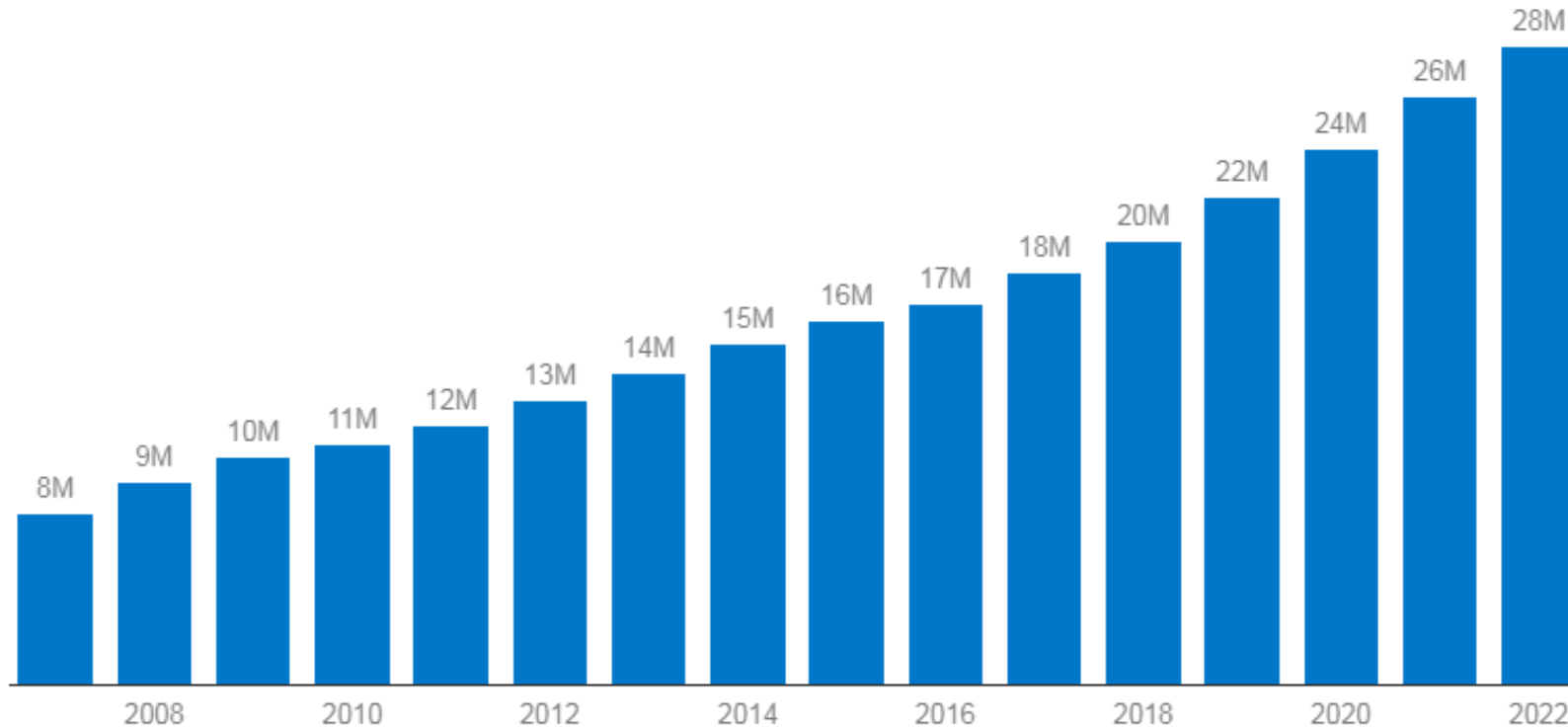
Projected to rise to 61% by 2032

NOTE: Includes Medicare Advantage plans: HMOs, PPOs (local and regional), PFFS, and MSAs. About 58.6 million people are enrolled in Medicare Parts A and B in 2022.

SOURCE: KFF analysis of CMS Medicare Advantage Enrollment Files, 2010-2022; Medicare Chronic Conditions (CCW) Data Warehouse from 5 percent of beneficiaries, 2010-2017; CCW data from 20 percent of beneficiaries, 2018-2020; and Medicare Enrollment Dashboard 2021-2022. • [PNG](#)



MA will be bigger than FFS next year!



NOTE: Includes Medicare Advantage plans: HMOs, PPOs (local and regional), PFFS, and MSAs. About 58.6 million people are enrolled in Medicare Parts A and B in 2022.

SOURCE: KFF analysis of CMS Medicare Advantage Enrollment Files, 2010-2022; Medicare Chronic Conditions (CCW) Data Warehouse from 5 percent of beneficiaries, 2010-2017; CCW data from 20 percent of beneficiaries, 2018-2020; and Medicare Enrollment Dashboard 2021-2022. • [PNG](#)

KFF

Medicare Advantage (MA) is rapidly taking over fee for service

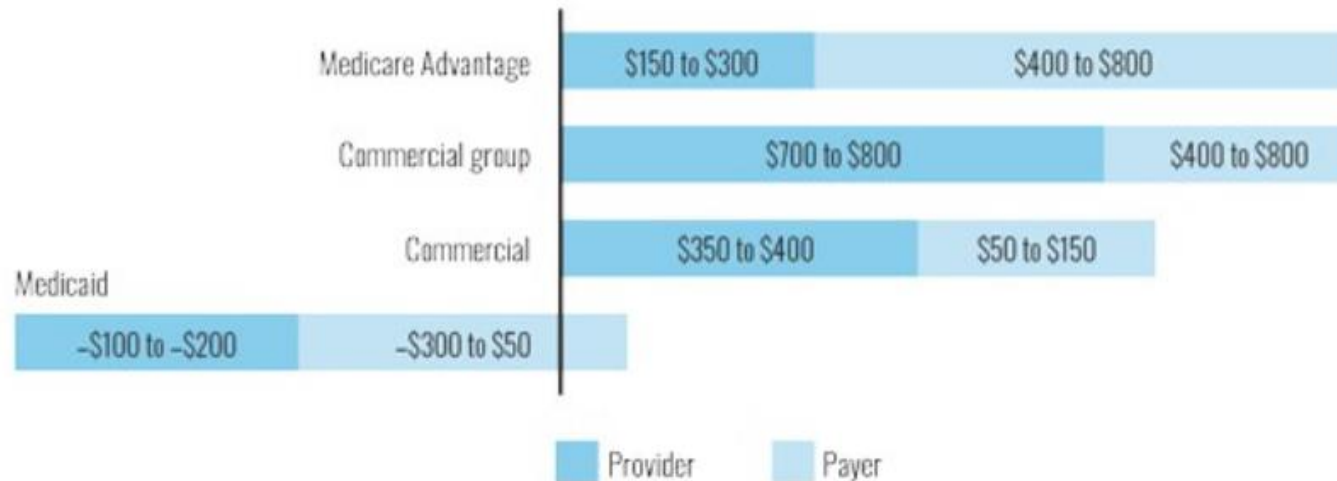
This shift will drive the need for greater awareness and partnerships

This will create a change for both Medicare and professional medical groups in the future

Health Systems Looking to Capture More Value

Payer and provider profitability by payer segment

Health systems already earn some 70% of the per-member profit in the commercial segment due to their success over the past several decades in fee-for-service price negotiations. The opposite is true in the Medicare Advantage marketplace, where health insurance companies still control about 73% of the profits.

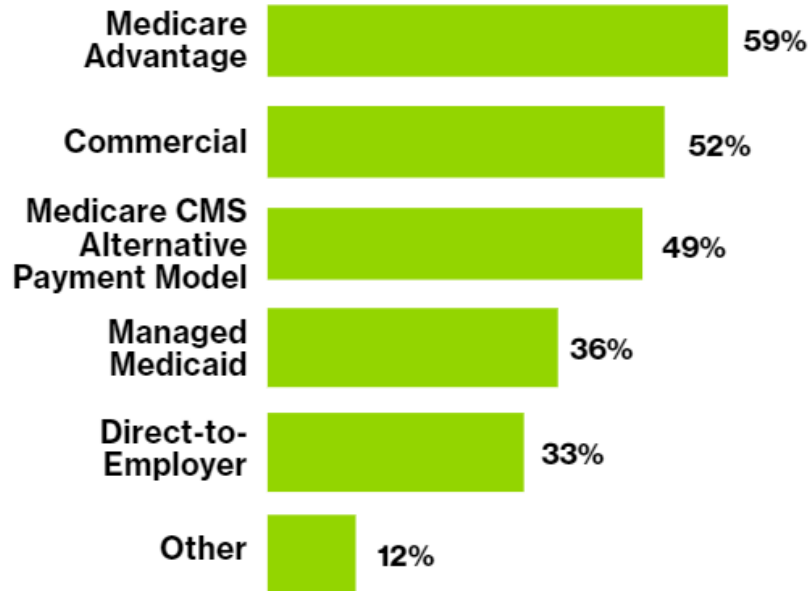


Source: BDC Advisors analysis of data from McKinsey Healthcare Systems and Services Practice

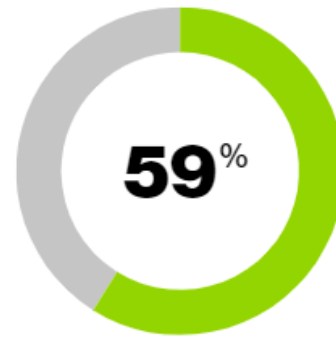
As Medicare Advantage continues to be adopted, health care organizations and providers will need to ensure they are receiving appropriate reimbursement for the care they are providing, especially for the more chronic patient population

Medicare Advantage is top of mind for Health Systems

Which lines of business is your organization planning to advance into upside/downside risk, professional capitation, or global capitation in 2022 (select all)?

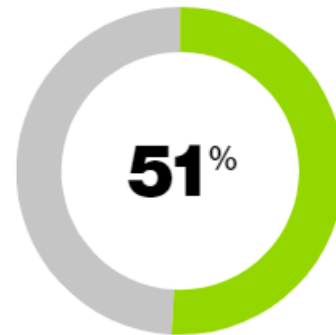


Medicare Advantage



2021

vs



2019

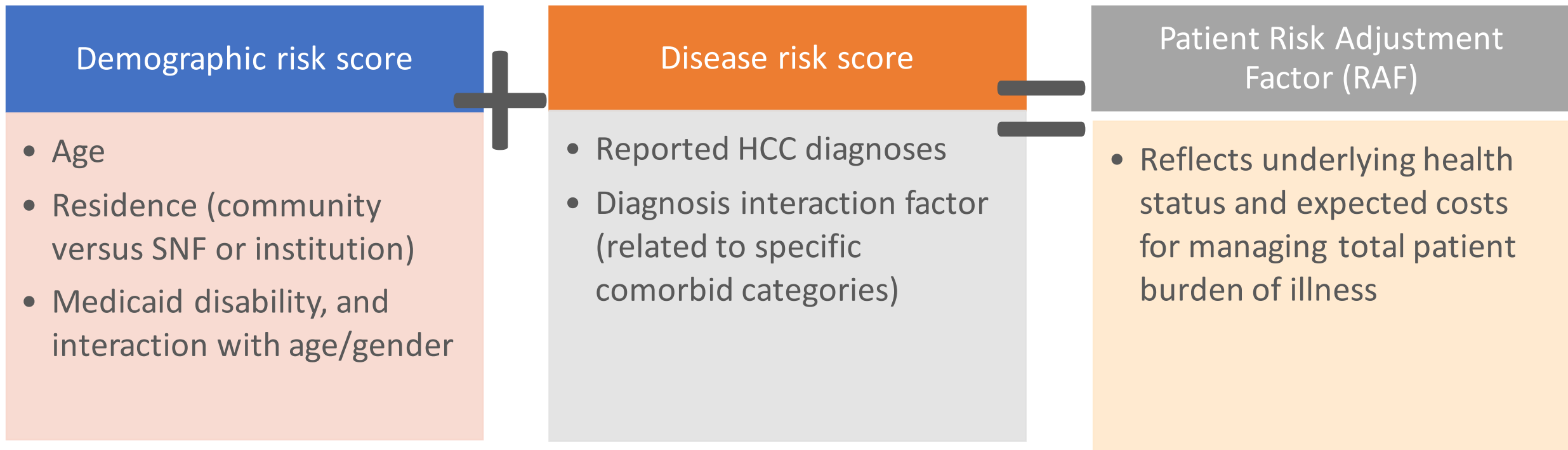


An HFMA 2020 -2021 survey indicates the importance and growth of Medicare Advantage to a health care system

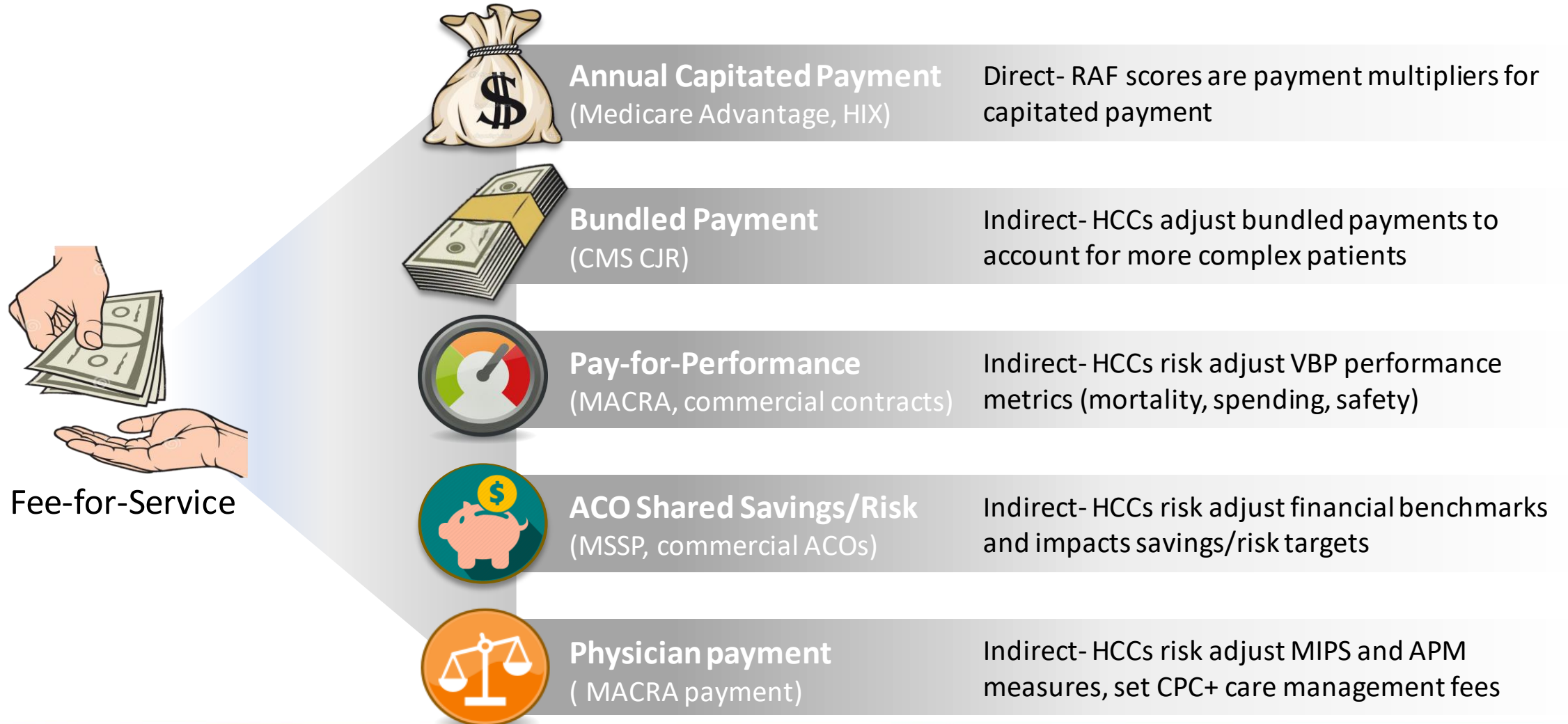
- Nearly 60% are advancing into Medicare Advantage
- This has increased by 14% since the previous June 2019 survey

The goal in capturing HCCs: Ensure billed diagnoses represent full patient burden of illness

Risk Adjustment Factor (RAF) score is the patient burden of illness in order to predict costs to treat the patient for a year.



HCCs in multiple value-based payment programs





Challenges to capturing accurate patient burden of illness

Time is the most precious resource we have

Delivering
high-quality care



EHR and
anything that
distracts from
**Interaction with
the Patient**

Key steps in capturing HCCs (and common challenges)



Face-to-face
patient visit

Visit Types

- Hospital inpatient and outpatient
- Physician / NPP (NP, PA, NW, CRNA)

Exclusions:

- Hospice, SNF
- Home health
- Free-standing ASC

- Patients missing HCCs do not have visits scheduled
- No way to identify patients
- No easy process to schedule at-risk patient for a visit



Physician addresses and
diagnoses condition(s)

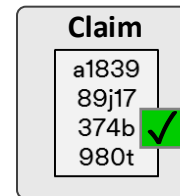
Providers

- Physicians
- NP, CRNA
- Psychologist/Psychiatrist

Services Excluded:

- DME
- Laboratory
- Diagnostic radiology

- Physician doesn't know what patient information is contained in disconnected EMRs
- Not all HCC-diagnoses are captured/documented



Dx coded and
itemized in claim

Requirements

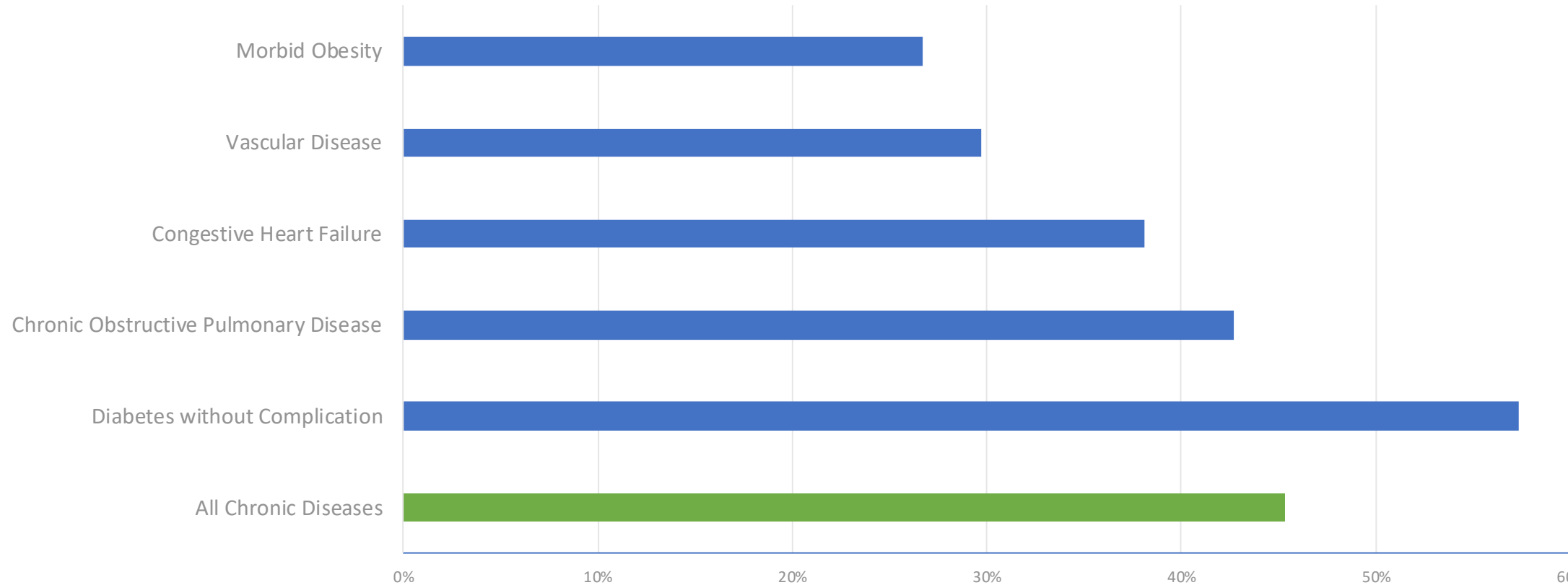
- Each HCC diagnosis submitted in a claim once per calendar year
- Must be supported by documentation in visit note

- Physician documents an HCC-diagnosis but does not code for it
- Providers trained to code diagnoses for pro-fee billing, not HCC capture
- 80-90% of office visits coded by providers with no coder review

HCCs must be treated, documented, coded, and billed at some point across care settings

ICD-10 coding is challenging and time consuming

Chronic disease is reconfirmed only **45%** of the time



Physician engagement – the key to success

- Engaging physicians in cost and quality improvements has the greatest opportunity to improve performance
- Nearly 90% of hospital and health system executives reported an interest in physician engagement
- Physician engagement has consistently been a strategic priority for progressive provider organizations

50% time spent on administrative tasks

Complex clinical documentation requirements

Create time for patient care

Face time with patients

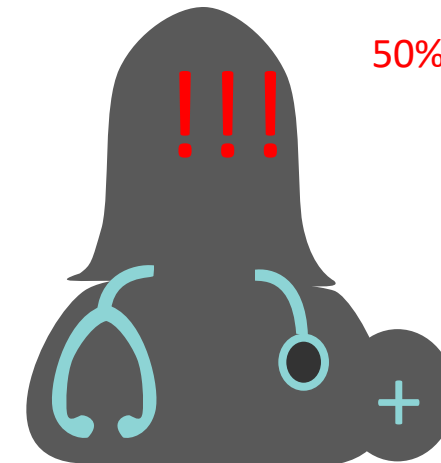
Disruptive queries from CDIS

50% burnout rate

Competing priorities

Working after hours

Patient satisfaction



-- Advisory Board survey of hospital CEOs

By Ming Tai-Seale, Ellis C. Dillon, Yan Yang, Robert Nordgren, Ruth L. Steinberg, Teresa Nauenberg, Tim C. Lee, Amy Meehan, Jinnan Li, Albert Solomon Chan, and Dominick L. Frosch

Physicians' Well-Being Linked To In-Basket Messages Generated By Algorithms In Electronic Health Records

ABSTRACT Despite concerns about physicians' workload associated with electronic health records (EHRs), little attention has been paid to the relationship between physicians' well-being and the in-basket messages physicians receive—specifically, their volume and sources. Analyses of EHR work performed by physicians in a multispecialty practice found that in-basket messages generated by the EHR system accounted for almost half (114) of the 243 weekly in-basket messages received per physician, on average—far exceeding the numbers received from their colleagues (53) and patients (30). In a survey, 36 percent of the physicians reported burnout symptoms, and 29 percent intended to reduce their clinical work time in the upcoming year. Receiving more than the average number of system-generated in-basket messages was associated with 40 percent higher probability of burnout and 38 percent higher probability of intending to reduce clinical work time. Physicians' perceptions of a positive work environment were associated with lower odds of burnout and intention to reduce clinical work time and with greater satisfaction with life. Female physicians had a higher risk of burnout and lower satisfaction with life, compared to males. Meaningful redesign of EHR in-basket workflow and a wellness-enhancing work environment are necessary to effectively improve physicians' well-being.

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Foundation, Inc.

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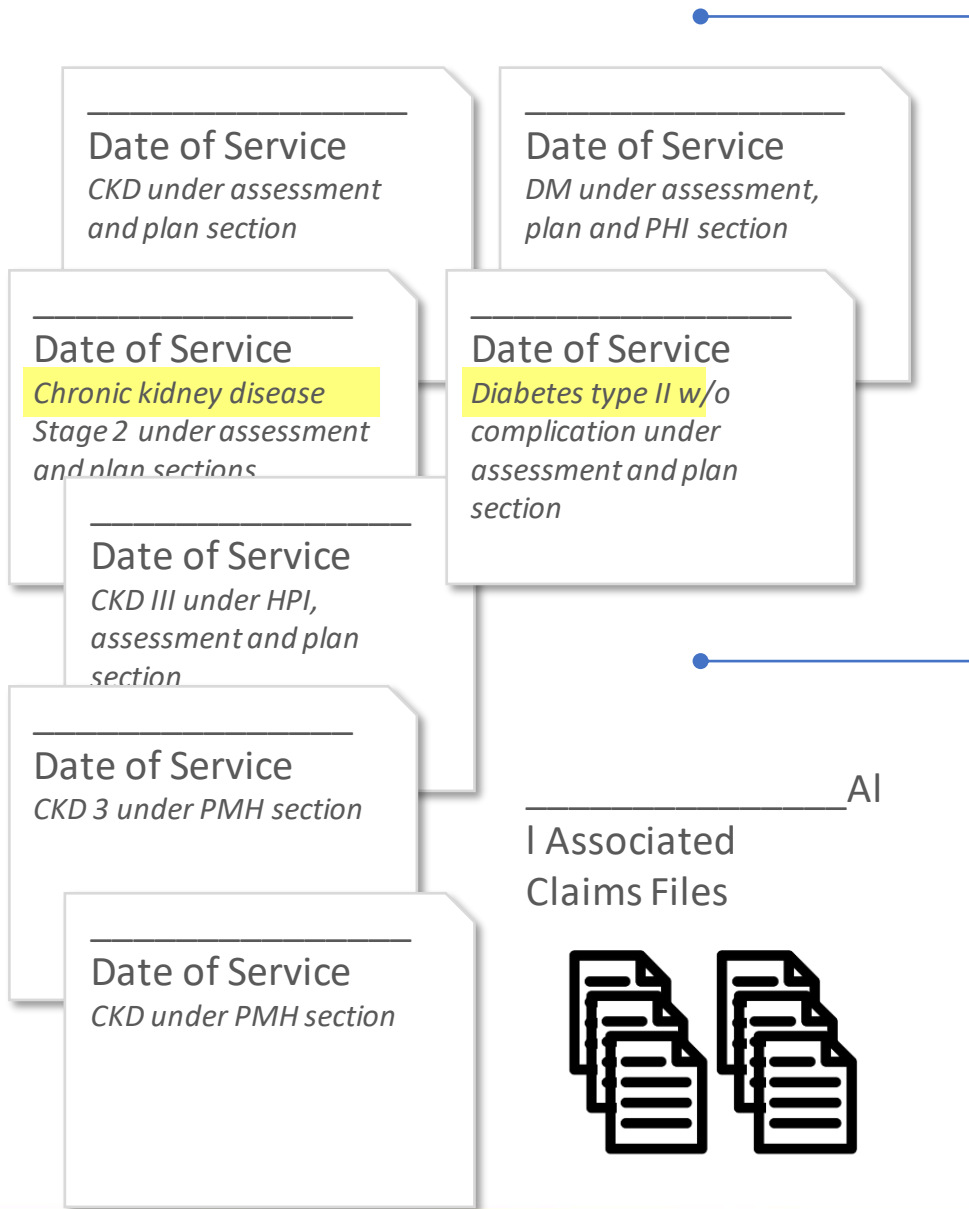
Ellis C. Dillon is an assistant scientist in the Research Institute, Palo Alto Medical Foundation, in California.

Yan Yang is a research economist in the Research Institute, Palo Alto Medical Foundation.

Robert Nordgren is CEO of the Palo Alto Foundation Medical Group.

Ruth L. Steinberg is chair of the Physician Wellbeing Committee, Palo Alto Medical Foundation.

“
Receiving more than the average number of system-generated in-basket messages was associated with **40 percent higher probability of burnout**”



All annual encounters

If evidence of Kidney Disease and Diabetes Mellitus in separate encounters; complication not coded

SINGLE ENCOUNTER

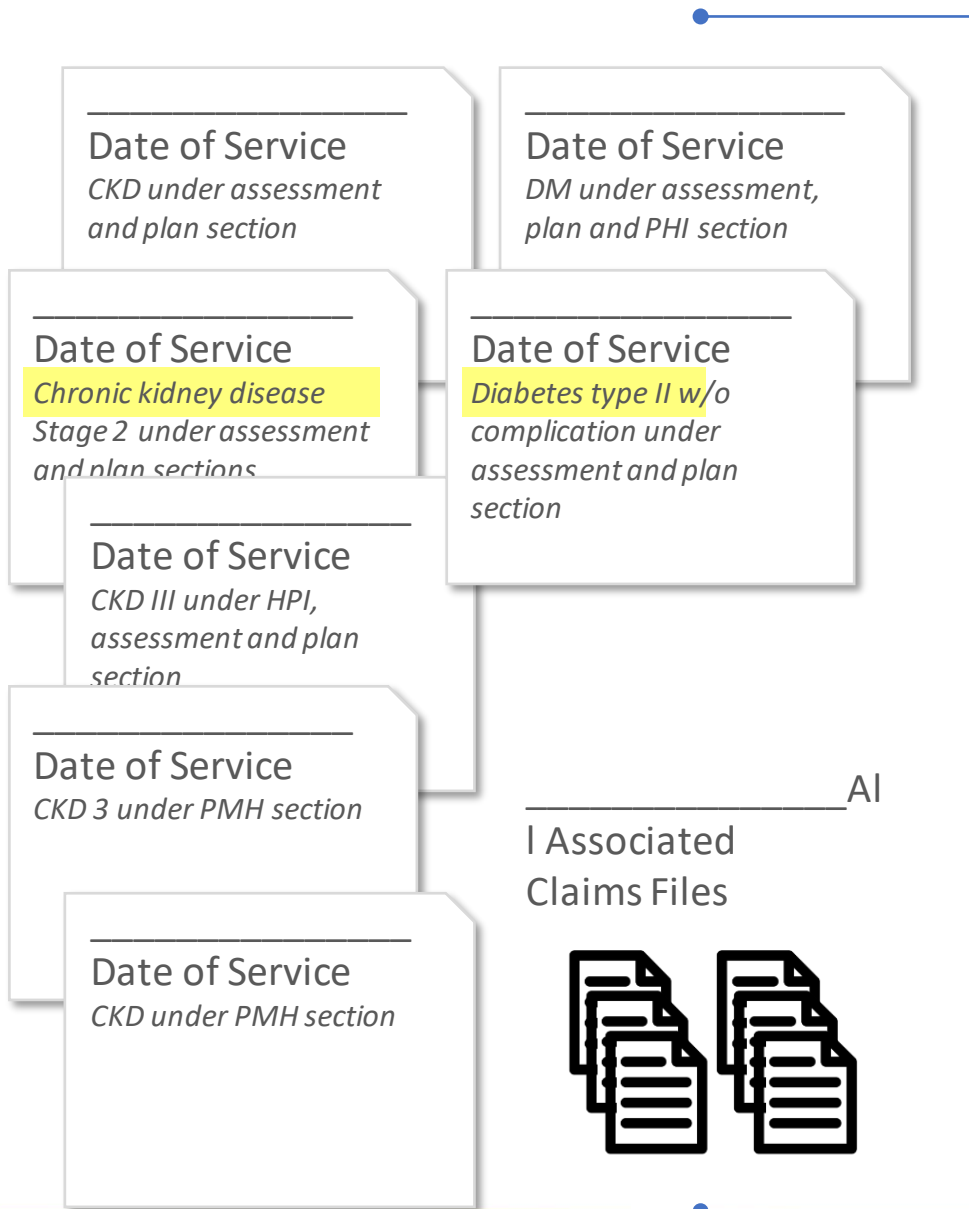
ICD-10-CM E11.9 |
Diabetes mellitus
w/out complications

HCC 19 | Diabetes
without complications
documented with evidence
of treatment and follow up

ALL ENCOUNTERS

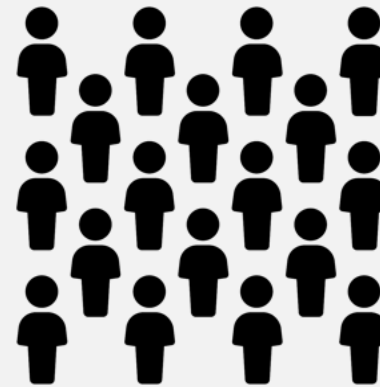
ICD-10-CM E11.22 |
Diabetes mellitus with
diabetic chronic CKD

HCC 18 | Diabetes Type II
with chronic complications



All population data

Payment and quality models identify incidence, severity and financial benchmarks to determine performance across a population.



% of ICD-10-CME11.9
 % of ICD-10-CME11.22
 % of HCC 18
 % of HCC 19



The right information, at the right time, in
the right format, for the right patient.

Using technology to operationalize your process.

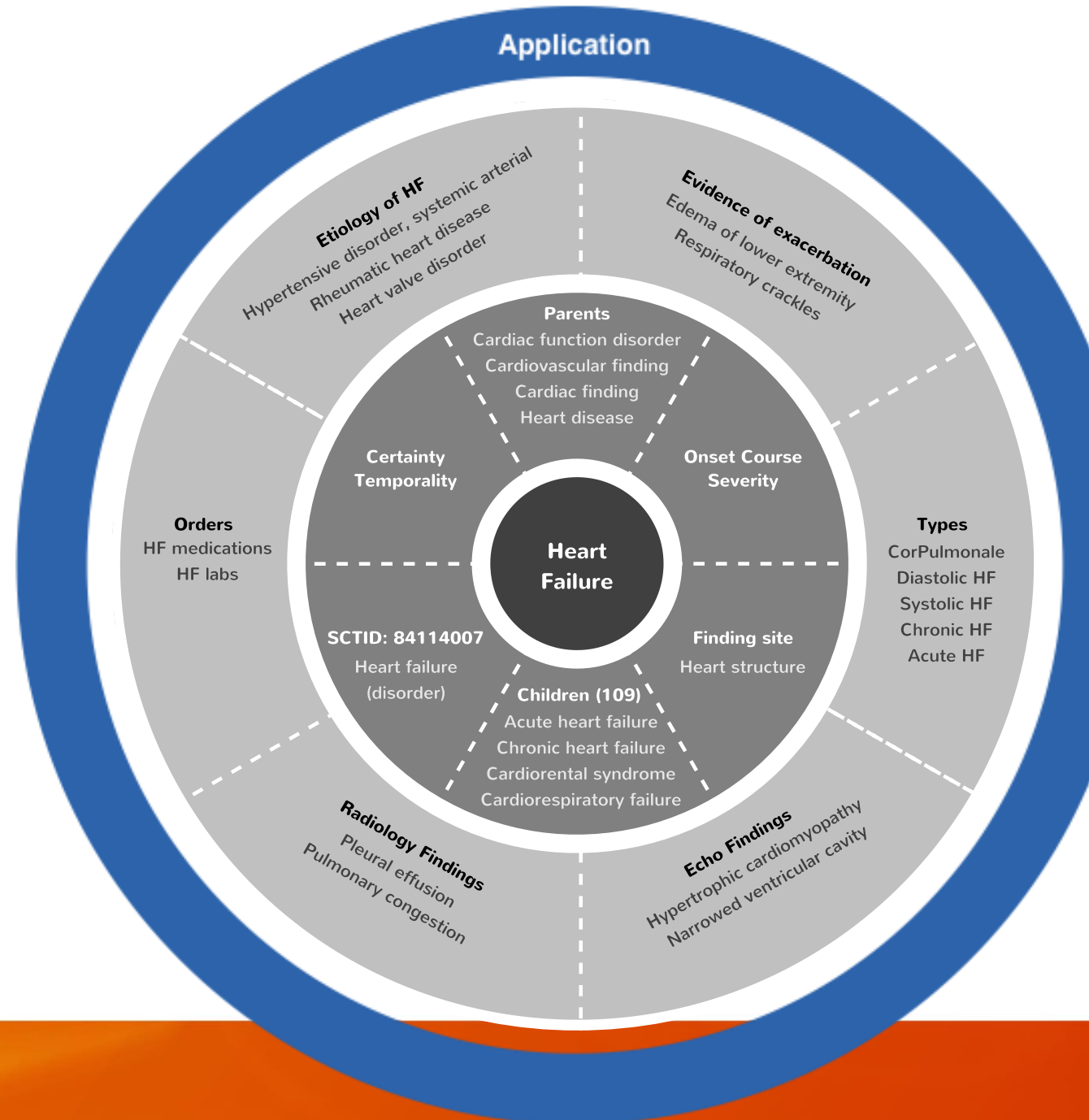
Natural Language Understanding: Clinical Information Models

- Start by modeling the medical conditions and disease states that a patient may have
- Decompose model into concepts to be found in clinical documentation
- Identify concepts across structured and unstructured data sources



Natural Language Understanding

- Start by modeling the medical conditions and disease states that a patient may have
- Decompose model into concepts to be found in clinical documentation
- Identify concepts across structured and unstructured data sources
- “Fill in” the information model with the concepts identified in the clinical record
- Reason over modeled patient for application-specific purposes (CDI, HCC, quality, COVID-19...)



HCC Management: A Comprehensive Solution

Comprehensive solution for improving risk-adjusted documentation and coding, patient care, and reimbursement across the care continuum



M*Modal SOAP Note Clinical Note

1 Dan H Engel

Your messages are up to date.

HCC Summary

- Suspected diagnoses**
 - Major depressive disorder... F32.9
- Missing supported evidence**
 - Chronic atrial fibrillation 148.2
 - Type 2 diabetes mellitus... E11.42
- Suggested billing diagnoses**
 - Body mass index (BMI)... Z68.41

Clinical Note

The patient is a 67-year-old female here today for failure and CKD. Her history is also significant for and COPD.

Recent labs show potassium 2.7 and sodium 129

Roderick, Sanford MRN: 12646703 Current YTD RAF: 0.299
M 81 y/o (11/22/1939) RAF Gap: 1.024 Target Year RAF: 1.323

Diagnoses Visits Documents Claims Notes Activity

Not Found in 2021 Claims - All 15 + Add

Show: CMS-HCC (15)

Prior Year Confirmed

- E11.9 (CMS-HCC 19) Type 2 diabetes mellitus without complications RAF 0.106
- E11.9 (CMS-HCC 19) Type 2 diabetes mellitus without complications RAF 0.105
- R64 (CMS-HCC 21) Cachexia RAF #,##

Suspected

- F33.0 (CMS-HCC 59) Major depressive disorder, recurrent, mild RAF 0.353
- E11.42 (CMS-HCC 18) Type 2 diabetes mellitus with diabetic polyneuropathy RAF 0.307
- E11.42 (CMS-HCC 18) Type 2 diabetes mellitus with diabetic polyneuropathy RAF 0.302
- I48.91 (CMS-HCC 96) Unspecified atrial fibrillation RAF 0.271

Evidence for E11.42 (CMS-HCC 18) - Type 2 diabetes mellitus with diabetic polyneu...

Not found in 2021 claims [Mark as Invalid](#)

This diagnosis has been included in the provider notification. [Remove](#)

2021

Office Visit 03/05/2021 by Dr. Robert Picardo

Assessment / Plan: ...Benign essential hypertension. Stable **Type 2 Diabetes mellitus** with diabetic neuropathy. Diabetes is...

Problems: ... **Diabetes mellitus type 2**, Hyperlipidemia, Benign essential hypertension, Coronary...

2020

Office Visit 07/20/2020 by Dr. Robert Picardo

Assessment / Plan: ...before next visit. Diabetic **peripheral neuropathy**. New onset, bilateral. Start Gabapentin...

Engage

Collaborate

All Patients ▾ Where's the count? [Add/remove columns](#)

RAF Gap	MRN	Patient Name	DOB	Age	Sex	Payer	Risk Managed
1.024	4046703	Billy Hargrove	6/2/1938	82	MALE	Med Advantage	Yes
1.024	26646703	Isla Massey	8/8/1936	84	female	Med Advantage	Yes
1.024	2946703	Jim Hopper	1/28/1935	86	MALE	Cigna	Yes
1.024	25646703	Eleanora Dunbar	9/9/1950	70	female	MCR	Yes
1.024	3846703	Max Mayfield	10/28/1942	78	FEMALE	MCR	Yes
1.024	20646703	Silas Vance	3/14/1950	71	male	Cigna	Yes
1.024	18646703	Cathryn Madison	5/16/1930	90	female	MCR	Yes
1.024	3146703	Jane Ives	11/9/1945	75	FEMALE	Blue Cross Blue Shield	Yes
1.024	3246703	Dustin Henderson	4/15/1940	81	MALE	UHC	Yes

Pro-active patient prioritization

Roderick, Sanford
M 81 y/o (11/22/1939) MRN: 12646703 Current YTD RAF: 0.299
RAF Gap: 1.024 Target Year RAF: 1.323

Diagnoses Visits Documents Claims Notes Activity

Not Found in 2021 Claims - Prioritized 11 + Add

Show: CMS-HCC (11)

- R64 (CMS-HCC 21) Cachexia [RAF #.##]
- F33.0 (CMS-HCC 59) Major depressive disorder, recurrent, mild [RAF 0.353]
- I25.110 (CMS-HCC 87) Atherosclerotic heart disease of native coronary artery with unstable angina pectoris [RAF 0.195]
- E11.42 (CMS-HCC 18) Type 2 diabetes mellitus with diabetic polyneuropathy [RAF 0.302]
- I48.91 (CMS-HCC 96) Unspecified atrial fibrillation [RAF 0.271]

Evidence for I48.91 (CMS-HCC 96) - Unspecified atrial fibrillation

Not found in 2021 claims [Mark as invalid](#)

This diagnosis has been included in the provider notification. [Remove](#)

2021

Office Visit 03/05/2021 by Dr. Robert Picardo

Assessment / Plan: ... Atrial fibrillation. Stable, today in normal sinus rhythm...

Problems: ...Coronary arteriosclerosis (s / p CABG x 3 2009), Atrial fibrillation, Pulmonary congestion, Peripheral neuropathy...

2020

Office Visit 07/20/2020 by Dr. Robert Picardo

Assessment / Plan: ... Atrial fibrillation. Stable, today in normal sinus rhythm...

Problems: ...Coronary arteriosclerosis (s / p CABG x 3 2009), Atrial fibrillation, Pulmonary congestion...

Provider Notification (3) On

1 Lisa Lohmueller
Patient: 12646703

Your messages are up to date.

HCC Engage

Suggested Diagnoses

- Type 2 diabetes mellit... E11.42
- Unspecified atrial fibril... I48.91
- Morbid (severe) obesi... E66.01

Prioritize patients in worklist

All Patients ▾ Where's the count? Add/remove columns

⚠️ You modified your worklist. [Save changes](#) [Undo](#)

🔄 Refresh (Updated a minute ago)

RAF Gap	MRN	Patient Name	DOB	Age	Sex	Payer	Risk Managed	Follow-Up	Provider Notification	RAF Gap Diagnoses	Next Visit
1.024	4046703	Billy Hargrove	6/2/1938	82	MALE	Med Advantage	Yes	🚩 02/26/2021	🔔	F33.0 Major depressive disorder, recurrent, mild (... 5 more)	
1.024	26646703	Isla Massey	8/8/1936	84	female	Med Advantage	Yes				
1.024	2946703	Jim Hopper	1/28/1935	86	MALE	Cigna	Yes				
1.024	25646703	Eleanora Dunbar	9/9/1950	70	female	MCR	Yes				
1.024	3846703	Max Mayfield	10/28/1942	78	FEMALE	MCR	Yes				
1.024	20646703	Silas Vance	3/14/1950	71	male	Cigna	Yes				
1.024	18646703	Cathryn Madison	5/16/1930	90	female	MCR	Yes				
1.024	3146703	Jane Ives	11/9/1945	75	FEMALE	Blue Cross Blue Shield	Yes		🔔	F33.0 Major depressive disorder, recurrent, mild (... 6 more)	
1.024	3246703	Dustin Henderson	4/15/1940	81	MALE	UHC	Yes			F33.0 Major depressive disorder, recurrent, mild (... 5 more)	
1.024	3446703	Nancy Wheeler	8/23/1937	83	FEMALE	Blue Cross Blue Shield	Yes		🔔	F33.0 Major depressive disorder, recurrent, mild (... 3 more)	
1.024	11646703	Cait Molinaro	11/22/1936	84	female	MCR	Yes	🚩 10/23/2020	🔔	E66.01 Morbid (severe) obesity due to excess calories (Sus...	
1.024	3546703	Jonathan Byers	3/25/1939	82	MALE	MCR	Yes		🔔	E11.42 Type 2 diabetes mellitus with diabetic poly...	2 more
1.024	3746703	Will Byers	5/28/1943	77	MALE	Aetna	Yes		🔔	F33.0 Major depressive disorder, recurrent, mild (... 5 more)	
1.024	15646703	Hellen Black	8/19/1945	75	female	MCR	Yes		🔔	E11.42 Type 2 diabetes mellitus with diabetic poly...	4 more
1.024	16646703	Isabella Bell	7/18/1950	70	female	Blue Cross Blue Shield	Yes	🚩 02/19/2021	🔔	E11.42 Type 2 diabetes mellitus with diabetic poly...	2 more
1.024	3646703	Martin Brenner	1/28/1950	71	MALE	MCR	Yes	🚩 04/23/2021	🔔	F33.0 Major depressive disorder, recurrent, mild (... 3 more)	
1.024	13646703	Marlon Dalton	10/21/1936	84	male	Cigna	Yes	🚩 08/05/2020	🔔	F33.0 Major depressive disorder, recurrent, mild (... 8 more)	

Diagnoses not captured this year **6**

- F33.0 Major depressive disorder, recurrent, mild (Suspected) **0.353**
- E11.42 Type 2 diabetes mellitus with diabetic polyneuropathy (Suspected) **0.307**
- E11.42 Type 2 diabetes mellitus with diabetic polyneuropathy (Suspected) **0.302**
- I48.91 Unspecified atrial fibrillation (Suspected) **0.271**
- I48.91 Unspecified atrial fibrillation (Suspected) **0.268**
- I25.110 Atherosclerotic heart disease of native coronary artery with unstable angina pectoris (Suspected) **0.195**

Review diagnoses from whole patient record

Roderick, Sanford MRN: 12646703 Current YTD RAF: 0.299
M 81 y/o (11/22/1939) RAF Gap: 1.024 Target Year RAF: 1.323 Details

Provider Notification (3) Off Finish chart review

Diagnoses Visits Documents Claims Notes Activity

Not Found in 2021 Claims - Prioritized 11 + Add

Show: CMS-HCC (11) ▾

- ✓ R64 (CMS-HCC 21) Cachexia RAF #.##
- Suspected
- ⚠ F33.0 (CMS-HCC 59) Major depressive disorder, recurrent, mild RAF 0.353
- ✓ I25.110 (CMS-HCC 87) Atherosclerotic heart disease of native coronary artery with unstable angina pectoris RAF 0.195
- ⚠ E11.42 (CMS-HCC 18) Type 2 diabetes mellitus with diabetic polyneuropathy RAF 0.302
- ⚠ I48.91 (CMS-HCC 96) Unspecified atrial fibrillation RAF 0.271

Evidence for I48.91 (CMS-HCC 96) - Unspecified atrial fibrillation

Not found in 2021 claims [Mark as invalid](#) Include in provider notification

⚠ This diagnosis has been included in the provider notification. [Remove](#)

2021

Office Visit 03/05/2021 by Dr. Robert Picardo

Assessment / Plan:
... **Atrial fibrillation. Stable**, today in normal sinus rhythm...

Problems:
...Coronary arteriosclerosis (s / p CABG x 3 2009), **Atrial fibrillation**, Pulmonary congestion, Peripheral neuropathy...

2020

Office Visit 07/20/2020 by Dr. Robert Picardo

Assessment / Plan:
... **Atrial fibrillation. Stable**, today in normal sinus rhythm...

Problems:
...Coronary arteriosclerosis (s / p CABG x 3 2009), **Atrial fibrillation**, Pulmonary congestion...

Health Insurance Claim 07/20/2020

Insurance	Aetna
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Create provider notification

Provider notification for Sanford Roderick's next visit

Included Diagnoses

- Type 2 diabetes mellitus with diabetic polyneuropathy
- Unspecified atrial fibrillation
- Major depressive disorder, recurrent, mild

Comments for provider

In HCC Engage, these are accessed via the ⓘ icon.

Dear doctor,
Please document the most appropriate diabetes code, ****E11.41****, so that the severity of illness score for this patient is as accurate as possible. E11.9 is no longer appropriate due to the onset of peripheral neuropathy in 2019.

****Atrial Fibrillation**** needs to be reconfirmed on a claim this year since it is still being actively treated.

I suggest the major depressive disorder code based on findings from the patient documentation. Please capture this

Notification OFF ON

Providers will see the following notification when accessing the patient in the EHR.

[Print this notification...](#)

HCC Summary

▲ Suspected Diagnoses

Type 2 diabetes mellitus with ...	E11.42
Unspecified atrial fibrillation	I48.91
Major depressive disorder, re...	F33.0

Last modified today at 12:36 pm

[Return to Worklist](#) [Close](#)

Health Insurance Claim 07/20/2020

Open patient chart, receive proactive nudge

Demo EHR Schedule Patients Claims Quality Support

Roderick, Sanford
81 y/o M 1939-11-22 #12646703 V#112233445516

Allergies +
Pollen

Current Visit

Problems

Medications

Vitals

Documents

Recent Results

Hemoglobin A1c (procedure) - a year ago

glucose	8.2	mmol/L
---------	-----	--------

HCC Engage
Your messages are up to date.
Suggested Diagnoses
Type 2 diabetes mellit... E11.42
Unspecified atrial fibril... I48.91
Morbid (severe) obesi... E66.01

HCC Review Details for Sanford Roderick
Roderick, Sanford Sex: Unk MRN: 12646703 Age: Unk Enc #: 112233445516

Comments Evidence in Documentation

There are **3 diagnoses** that might need **additional action** this year.

Suggested Diagnoses

- E11.42 (HCC 18) Type 2 diabetes mellitus with diabetic polyneuropathy
- I48.91 (HCC 96) Unspecified atrial fibrillation
- E66.01 (HCC 22) Morbid (severe) obesity due to excess calories

Office Visit
By Dr. Robert Picardo on 3/5/2021

Assessment / Plan:
... Benign essential hy

Problems:
Diabetes mellitus typ

HCC Review Details for Sanford Roderick
Roderick, Sanford Sex: Unk MRN: 12646703 Age: Unk Enc #: 112233445516

Comments Evidence in Documentation

Dear doctor,
Please document the most appropriate diabetes code, **E11.41**, so that the severity of illness score for this patient is as accurate as possible. E11.9 is no longer appropriate due to the onset of peripheral neuropathy in 2019.

Atrial Fibrillation needs to be reconfirmed on a claim this year since it is still being actively treated

I suggest the major depressive disorder code based on findings from the patient documentation. Please capture this diagnosis if appropriate.

MEAT Reminder: All diagnoses must be supported in documentation with evidence of:

- Monitoring
- Evaluation
- Assessment
- Treatment

Document Author Date

Close

Example

- Document annual wellness visit note, HCC Engage updates
- HPI: The patient is an 81-year-old male here today for his annual evaluation. He is healthy appearing and well nourished. No acute distress currently but complains of waking at night with symptoms of night sweats and dizziness. The patient has type 2 diabetes, atrial fibrillation, and is a smoker. He smokes one pack per day and has been smoking for the past ten years. He checks sugars every 3 days. Last fasting was 130. Seeing an eye doctor regularly. Peripheral neuropathy improving since starting Gabapentin and he continues to check his feet regularly. He is living alone in his senior housing complex and is walking around the apartment and building with assistance. Mild insomnia, but no weight gain or loss; no dizziness; no sweats; no headaches; no confusion; no blurred vision; no calluses on feet. Decreased bilateral foot numbness since last visit.
- ROS: All systems normal, except as noted in HPI.
- Vitals: weight 224 lbs, height 62", BP 140/94 sitting L arm.
- Assessment and Plan:
- Morbid obesity. Patient to see nutritionist next week to follow up on recent diet improvements.

2 Crystal H Stalter

Checking for messages.

HCC Review

Suspected diagnoses

Major depressive disorder... F32.9

Missing supporting evidence

Unspecified atrial fibrillation... I48.91

Type 2 diabetes mellitus... E11.42

Suggested billing diagnoses

Morbid (severe) obesity... E66.01

Body mass index (BMI)... Z68.41

Atrial Fibrillation

Please consider further specifying the **type**.

Example

- Document annual wellness visit note, HCC Engage updates

HPI: The patient is an 81-year-old male here today for his annual evaluation. He is healthy appearing and well nourished. No acute distress currently but complains of waking at night with symptoms of night sweats and dizziness. The patient has type 2 diabetes, atrial fibrillation, and is a smoker. He smokes one pack per day and has been smoking for the past ten years. He checks sugars every 3 days. Last fasting was 130. Seeing an eye doctor regularly. Peripheral neuropathy improving since starting Gabapentin and he continues to check his feet regularly. He is living alone in his senior housing complex and is walking around the apartment and building with assistance. Mild insomnia, but no weight gain or loss; no dizziness; no sweats; no headaches; no confusion; no blurred vision; no calluses on feet. Decreased bilateral foot numbness since last visit.

ROS: All systems normal, except as noted in HPI.

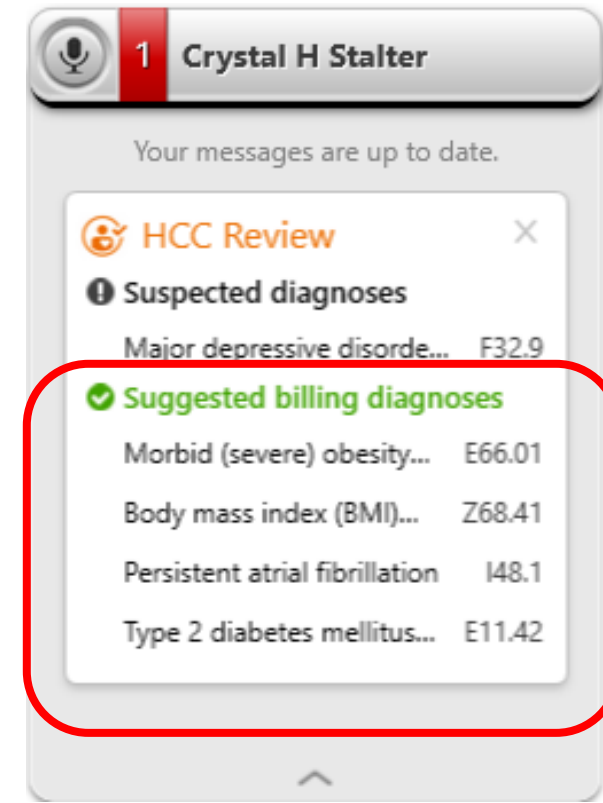
Vitals: weight 224 lbs, height 62", BP 140/94 sitting L arm.

Assessment and Plan:

Morbid obesity. Patient to see nutritionist next week to follow up on recent diet improvements.

Persistent atrial fibrillation. Continue Warfarin and repeat EKG in three weeks.

Type 2 diabetes mellitus with diabetic peripheral neuropathy, well controlled, A1c 6.8. Continue Metformin and repeat A1C in three weeks. Neuropathy, stable on Gabapentin. Continue current regimen.



3M HCC Management Analytics

Utilization Monitoring

CDS scorecards, daily and weekly reports detailing activity in HCC Engage and HCC Collaborate

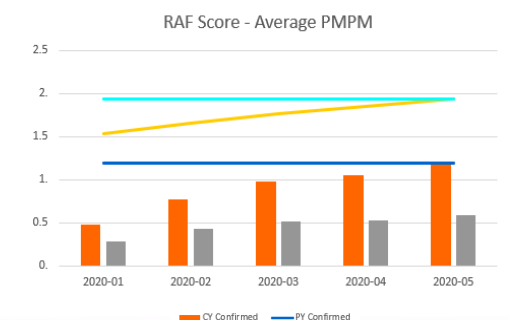
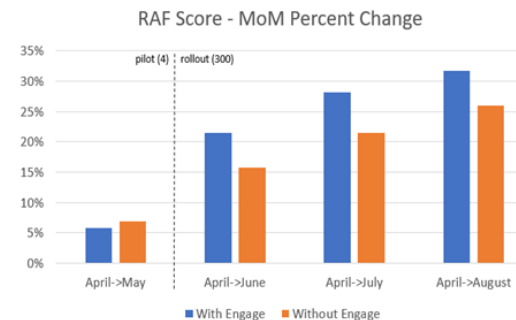
Action Reports

Detailed information focused on specific follow up opportunities to drive RAF capture, reconfirmation rate and audit risk mitigation

Outcomes Analysis

Monthly and year-over-year tracking of progress compared to baseline and trends in cohort groups (payer, provider)

DOB	GENDER	HCC	HCC DESCRIPTION	ICD-10	ICD-10 DESCRIPTION	RAF SCORE	DATA SOURCE
11/22/1936	F	19	Diabetes without chronic	E11.9	Diabetes Type II, unspec	0.121	claim
11/22/1936	F	96	Specified Heart Arrhythmias	I48.91	chronic atrial fibrillation	0.224	claim
11/22/1936	F	18	Diabetes with chronic complication	E11.42	type II diabetes with peripheral	0.441	claim
11/22/1936	F	58	Major Depressive, Bipolar and	F32.0	Major depressive disorder, single	0.271	documentation
11/22/1936	F	96	Specified Heart Arrhythmias	I48.91	chronic atrial fibrillation	0.224	documentation
11/22/1936	F	18	Diabetes with chronic complications	E11.42	type II diabetes with peripheral	0.441	claim
11/22/1936	F	87	Unstable angina and other Acute	I25.110	Coronary atherosclerosis of	0.497	claim
1/1/1944	M	85	Congestive Heart Failure	I11.0	Hypertensive heart disease with	0.377	documentation
1/1/1944	M	11	Colorectal, Bladder and Other CA	C18.0	Malignant Neoplasm of Cecum	0.301	claim
1/1/1944	M	85	Congestive Heart Failure	I50.32	chronic diastolic heart failure	0.323	claim
1/1/1944	M	96	Specified Heart Arrhythmias	I48.2	chronic atrial fibrillation	0.268	claim
1/1/1944	M	75	Myesthenia Gravis	G62.82	diation-induced polyneuropathy	0.369	documentation
1/1/1944	M	85	Congestive Heart Failure	I50.32	chronic diastolic heart failure	0.191	claim
1/1/1944	M	11	Colorectal, Bladder and Other CA	C18.0	Malignant Neoplasm of Cecum	0.293	claim
3/17/1955	F	77	Multiple Sclerosis	G35	Multiple Sclerosis	0.441	claim
3/17/1955	F	135	Acute Renal Failure	N18.4	CKD Stage 4	0.422	claim



Benefits of a closed loop CAPD system:

- Accurate and appropriate RAF score, representing true patient severity of illness
- Improved productivity and impact of outpatient (risk based) CDI program
- Complete and compliant documentation and coding, the first time
- Improved physician satisfaction with HCC documentation and billing requirements
- Improved patient outcomes as care shifts from acute response to chronic disease management
- Access to data needed to address education and follow-up training throughout the year
- Accurate risk adjusted reimbursement, improved performance in MSSP, Medicare MA, Medicaid, ACA and commercial payer risk contracts



Developing a comprehensive HCC capture process

Building the team – a multi-pronged process

- **Structured team approach**
 - Clinician leadership, Clinical Champions, HIM leadership, Technology team
 - Strong project management / oversight
- **Establish goals with metrics** for monitoring by steering committee
 - Real Time analytics MUST be involved in project management
 - Claims adjudication / metrics lag does NOT facilitate QI / PI and change management
- **Prioritization based on value** of chart review focus areas, needs
 - Historical learnings, data provided guidance
 - Optimization of EMR with performance plateau necessitated action
 - Strong alignment with regional PHO
- **Process for prospective and retrospective** CDI and coding reviews
 - Existing inpatient CDI team
 - Newly formed ambulatory coding team
 - Education / outreach – moved from paper to technology platform

Where they started

Initial process



Challenges with this process

- Optimize the workflow and data from the EHR as much as possible
- Educate key stakeholders
- Implement practice advisories and worked closely with clinicians
- Create and share reports based on reviewed claims and dropped opportunities
- On-going education

- Claims adjudication and the associated timeline created a **lag of metrics** from 3 months or longer, depending on the payer.
- **Lack of real-time process metrics** made it difficult to measure the impact and effectiveness of the programs.

Initial impact – results of a successful analysis

Across 11,000 patients and 13,000 encounters in 9 months:

HCC Capture	Increased from 41% to 46%
Average Potential RAF Score	Increased by 0.2246
Average Captured RAF Score	Increased by 0.0972
Average RAF Gap	Increased by 0.0451

- ✔ Performance based, real-time outcomes with information that can be seen over time.
- ✔ Analytics pulled from EMR and 3M to incorporate information from both systems.

Wrap-up

1. Capturing of patient burden of illness is essential for value-based care
2. Having accurate documentation is challenging and requires physician buy-in
3. Technology using natural language understanding (NLU) facilitates accurate documentation at scale
4. Use of technology and pro-active processes can deliver improved HCC capture



THANK YOU



RISE