# CDI and Coding for VBPM
## Cardiovascular



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CEO, ERM Consulting Inc.

Kameron is the founder and Chief Executive Officer of ERM Consulting and mHealth Games, an online learning company. Over the last 17 years she has worked hand in hand with physicians, managed care organizations, hospitals and health plans to develop efficient billing practices, implement value added processes and improve the entire experience of care for their patients. Kameron is passionate about risk adjustment and a strong advocate for frontline staff.

Kameron is also a primary author of the following national risk adjustment workshops presented by RISE and Healthcare Education Associates:
- Risk Adjustment 101
- HCC Coding Accuracy

And Co-author of the new RISE Workshop
- Advanced HCC Coding

**Todd Gifford, MBA, Ph.D, CRC**
Managing Director, mHealth Games

Prior to joining ERM, Todd was the Director of Finance for a large Medicare Advantage MSO based in Miami, Florida. He joined them in 2007 as Managing Director of Health Solutions UK, a joint venture with Humana. During his two and a half years in London he worked hand in hand with the NHS to transform the way care was delivered. From 2010 to 2012, Todd oversaw the start-up expansion into Texas. In this role, he was responsible for 12,500 MA members and a budget of $75m.

Todd graduated from the University of Arkansas with a B.A. in 1991, and received his MBA from Webster University in 2001. He was awarded a Ph.D in Business from Woodfield University in 2013.

In addition, Todd is also the Co-founder of mHealth Games, an innovative technology company headquartered in Miami, Florida.



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# Like Two Peas in a Pod…

You wouldn't want one without the other!

VBP RA

*CMS currently defines value-based care as paying for health care services in a manner that directly links performance on cost, quality and the patient's experience of care.*

**"Value Based Payment (VBP)** is a concept by which **purchasers of health care** (government, employers, and consumers) and payers (public and private) **hold the health care delivery system** at large (physicians and other providers, hospitals, etc.) **accountable for both quality and cost of care**…" - AAFP

Instead of payments that ask, "How much did you do?" Value based payments clearly move us toward payments that ask, "How well did you do?", and more importantly, "How well did the patient do?"

"**Risk adjustment** is a **statistical process** used to **identify and adjust for variation in patient outcomes** that stem from **differences in patient characteristics** (or risk factors) across health care organizations…"

- Joint Commission

"**Risk adjustment** is a **mechanism** for **adjusting payment rates, budgets, or both**, based on the **health status and expected spending** on a patient population."

- AMA

"**Risk adjustment model** means an **actuarial tool** used **to predict health care costs** based on the **relative actuarial risk of enrollees** in risk adjustment covered plans…"

- 45 CFR 153.20

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# HCCs Drive the VBP Reform

Fee-for-Service

| | |
|---|---|
| **Annual Capitated Payment** (Medicare Advantage, HIX) | RAF scores are payment multipliers for PMPM payments |
| **Bundled Payments** (CMS CJR) | HCCs adjust bundled payments to account for severity of illness |
| **Pay-for-Performance** (MACRA, Commercial Contracts) | HCCs risk adjust VBP performance metrics |
| **ACO Shared Savings** (MSSP, ACOs) | HCCs risk adjust financial benchmarks and savings targets |
| **Medical Homes** (CMS CPC+, PCMH) | RAF for a physician's panel determines care management fees. |

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# 2023 ICD-10 Coding Guidelines

- **List first** the ICD-10-CM code for the diagnosis, condition, problem, or other **reason for encounter/visit** shown in the medical record to be **chiefly responsible for the visit**.
- The **documentation must support the code selected** and substantiate that proper coding guidelines were followed
- **Chronic diseases** treated on an ongoing basis **may be coded and reported as many times** as the **patient receives treatment and care for the condition(s)**
- **Code all** documented conditions **that coexist at the time of the encounter/visit, and require or affect patient care, treatment or management.** *Do not code conditions that were previously treated and no longer exist.*
- **History codes** ( ICD-10: Z80-Z87 ) **personal and family history codes** may be used as secondary codes if the historical condition or family history has an impact on current care or influences treatment.
- Codes that describe **signs and symptoms**, as opposed to diagnoses, are acceptable for reporting purposes when **a diagnosis has not been established** (confirmed) by the provider. Chapter 18 of ICD-10-CM, *Symptoms, Signs, and Abnormal Clinical and Laboratory Findings Not Elsewhere Classified (codes R00-R99)* contain many, but not all codes for symptoms.
- **Do not code** diagnoses documented as **"probable", "suspected," "questionable," "rule out," or "working diagnosis"** or other similar terms indicating uncertainty. Rather, code the condition(s) to the highest degree of certainty for that encounter/visit, such as symptoms, signs, abnormal test results, or other reason for the visit.

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# Heart Failure

In systolic heart failure, the EF is less than 55%; an EF of 55% and above is diastolic failure.

Heart failure with reduced ejection fraction (HFrEF)
Heart failure with preserved ejection fraction (HFpEF)

- The diagnosis of heart failure is, first and foremost, **a clinical one**, based on history and physical examination traditionally defined by the 1948 Framingham diagnostic criteria.
- The Framingham diagnostic standards identify major and minor criteria. For a diagnosis of heart failure, a patient should meet either **two major criteria** or **one major criterion plus two minor criteria**.
- **Major criteria** include paroxysmal nocturnal dyspnea, orthopnea, elevated jugular venous pressure, S-3 gallop, pulmonary rales, and cardiomegaly or pulmonary edema on chest X-ray.
- **Minor criteria** include bilateral lower-extremity edema, nocturnal cough, dyspnea on ordinary exertion, hepatomegaly, pleural effusion, and tachycardia (≥120 beats/min).

**Acute or Chronic**

- Always **document clearly and consistently** in the medical record if there has been an acute exacerbation or decompensation of chronic heart failure—even if mild.

**Nature of Heart Failure**

- Systolic
- Diastolic
- Combined systolic/diastolic in nature.

**Common Diagnostic Tests**

- EKG
- Echo
- B-type natriuretic peptide (BNP)
- Stress Test

Other acceptable descriptions include heart failure "with low EF" or "with reduced systolic function" for systolic heart failure and "preserved systolic" or "preserved ventricular" function for diastolic heart failure. Similar descriptive terms are also acceptable for either systolic or diastolic function.

**Physical Findings in Heart Failure**

- Tachycardia
- S-3 gallop
- Pulmonary congestion (with or without rales)
- Elevated jugular venous pressure
- Hepato-jugular reflux
- Peripheral edema
- Other signs of volume overload
  - Hepatomegaly
  - Splenomegaly
  - Ascites

https://www.acphospitalist.org/archives/2019/02/coding-corner-heart-failure-documentation-challenges.htm

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# CDI and Coding Tips for Heart Failure

**Clinical documentation should be as specific as possible:**

- **Type** of heart failure, such as systolic (heart failure with reduced ejection fraction HFrEF), diastolic (heart failure with preserved ejection fraction HFpEF), combined systolic and diastolic or end stage.
- **Acuity**, such as acute, chronic, or acute on chronic
- **Underlying causes**, for example, hypertension (with or without chronic kidney disease), cardiomyopathy (specify type such as ischemic, dilated, restrictive, etc.), rheumatic, or non-rheumatic valvular disease
- **Comorbid conditions** that impact the care, management, treatment and outcomes.
- **Treatment plan** for all conditions documented in the Assessment.

| | |
|---|---|
| I11.0 | Hypertensive heart disease with heart failure |
| I13.0 | Hypertensive heart and CKD with heart failure and stage 1 through stage 4 CKD, or unspecified CKD |
| I13.2 | Hypertensive heart and CKD with heart failure and with stage 5 CKD, or ESRD |
| I27.20 | Pulmonary hypertension, unspecified |
| I27.21 | Secondary pulmonary arterial hypertension |
| I50.20 | Unspecified systolic (congestive) heart failure |
| I50.21 | Acute systolic (congestive) heart failure |
| I50.23 | Acute on chronic systolic (congestive) heart failure |
| I50.30 | Unspecified diastolic (congestive) heart failure |
| I50.31 | Acute diastolic (congestive) heart failure |
| I50.32 | Chronic diastolic (congestive) heart failure |
| I50.33 | Acute on chronic diastolic (congestive) heart failure |
| I50.9 | Heart failure, unspecified |

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# CDI and Coding Tips for Heart Failure

**Clinical documentation should be as specific as possible:**

- **Type** of heart failure, such as systolic (heart failure with reduced ejection fraction HFrEF), diastolic (heart failure with preserved ejection fraction HFpEF), combined systolic and diastolic or end stage.
- **Acuity**, such as acute, chronic, or acute on chronic; compensated and decompensated are also acceptable.
- **Underlying causes**, for example, hypertension (with or without chronic kidney disease), cardiomyopathy (specify type such as ischemic, dilated, restrictive, etc.)
- **Comorbid conditions** that impact the care, management, treatment and outcomes.
- **Treatment plan** for all conditions documented in the Assessment.

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| I11.0 | Hypertensive heart disease with heart failure |
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| I27.20 | Pulmonary hypertension, unspecified |
| I27.21 | Secondary pulmonary arterial hypertension |
| I50.20 | Unspecified systolic (congestive) heart failure |
| I50.21 | Acute systolic (congestive) heart failure |
| I50.23 | Acute on chronic systolic (congestive) heart failure |
| I50.30 | Unspecified diastolic (congestive) heart failure |
| I50.31 | Acute diastolic (congestive) heart failure |
| I50.32 | Chronic diastolic (congestive) heart failure |
| I50.33 | Acute on chronic diastolic (congestive) heart failure |
| I50.84 | End stage heart failure |
| I50.9 | Heart failure, unspecified |

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# CDI and Coding for Cardiac Arrythmias

- Atrial Fibrillation
  - ✓ Paroxysmal
  - ✓ Chronic
  - ✓ Long standing persistent
  - ✓ Other persistent
  - ✓ Permanent
  - Unspecified

| | |
|---|---|
| I48.0 | Paroxysmal atrial fibrillation |
| I48.11 | Longstanding persistent atrial fibrillation |
| I48.19 | Other persistent atrial fibrillation |
| I48.20 | Chronic atrial fibrillation, unspecified |
| I48.21 | Permanent atrial fibrillation |
| I48.91 | Unspecified atrial fibrillation |

- Atrial Flutter
  - ✓ Typical
  - ✓ Atypical
  - Unspecified

| | |
|---|---|
| I48.3 | Typical atrial flutter |
| I48.4 | Atypical atrial flutter |
| I48.92 | Unspecified atrial flutter |

- Others
  - ✓ AV block, complete
  - ✓ SVT
  - ✓ SSS

| | |
|---|---|
| I44.2 | Atrioventricular block, complete |
| I47.1 | Supraventricular tachycardia |
| I49.5 | Sick sinus syndrome |

**CDI Tips:**

- ✓ Avoid using "history of" to describe active conditions.
- ✓ Document your medical decision making.
- ✓ Use specific terms and ICD-10 codes.
- ✓ Include a treatment plan for all conditions documented in the A/P.

- I49.9 – Cardiac arrhythmia, unspecified

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# A. Fib and Secondary Hypercoagulable State

**Question:**
A 79-year-old patient is diagnosed with secondary hypercoagulable state and has a history of paroxysmal atrial fibrillation (AF) on anticoagulant maintenance. What is the appropriate ICD-10-CM code assignment for secondary hypercoagulable state in this scenario?

**Answer:**
Assign code D68.69, Other thrombophilia, for secondary hypercoagulable state. Secondary hypercoagulable state is specifically indexed to this code and includes secondary hypercoagulable state NOS.

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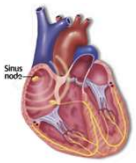
# Sick Sinus with Cardiac Devices




**Question:** How does one code **SSS** or ***other significant heart rhythm abnormality*** in the presence of a pacemaker?

**Answer:** It is appropriate to code the specific condition and the presence of the cardiac device.

- Although the pacemaker is controlling the heart rate, it does not cure SSS and the condition is still being managed/monitored

**Z95.0**, presence of a cardiac pacemaker

**AHA Coding Clinic :**
**First Quarter 2019, pp. 33–34**

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# Acute MI vs Old MI

**Acute MI** – code as acute for 28 days or 4 weeks

- If you have a face-to-face office visit within first 4 weeks, code as acute.
- If a patient is seen after 4 weeks, the correct code is I25.2, old MI.

**TIP:** Include the date of onset in your HPI.

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# CDI and Coding Tips for CAD with Angina Pectoris

When documenting CAD with angina pectoris, include the following:

- **Cause:** Assumed to be atherosclerosis; document if there is another cause.
- **Stability:** "Stable angina pectoris," if "angina equivalent," document the associated symptoms.
- **Vessel:** Note which artery (if known) is involved and whether the artery is native or autologous (for example, mammary, radial, etc.), chronic total occlusion of coronary artery.
- **Graft involvement:** If appropriate, whether a bypass graft was involved in the angina pectoris diagnosis; also note the original location of the graft and whether it is autologous or biologic.
- **Tobacco use/Exposure:** Any related tobacco use, abuse, dependence, past history, or exposure (second hand, occupational, etc.)

When angina is listed separately from CAD, and both conditions are supported in the documentation, a combination code from category I25.11x*

When angina is listed separately from CABG, and both conditions are supported in the documentation, a combination code from category I25.7x*

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# Stable Angina vs. Unstable Angina

**Stable angina** refers to chest discomfort that occurs predictably and reproducibly at a certain level of exertion and is relieved with rest or nitroglycerin.

**Angina is unstable** when there is a change in the usual pattern, such as a change in frequency, occurrence with less exertion, or occurrence at rest.

**Unstable angina** is considered an **acute condition with life-threatening consequences**.

→ It would **not** be reported in the office setting.

American Heart Association guidelines recommend initial treatment of unstable angina in the ED/ER.

**Medical management of unstable angina is different from stable angina, and it should be clearly supported by documentation.**

https://www.uptodate.com/contents/medications-for-angina-beyond-the-basics

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# Peripheral Vascular Disease

- ✓ **I73.9** – Peripheral vascular disease, unspecified

**Diabetic PAD / PVD**

- The risk of peripheral vascular disease (PVD) is increased in diabetic patients, occurs earlier and is often more severe and diffuse.
- ICD-10-CM presumes a causal relationship between "diabetes" with "peripheral angiopathy."
- These conditions should be coded as related even in the absence of provider documentation explicitly linking them, unless documentation clearly states the conditions are unrelated.

  - ✓ **E10.51** – Type 1 diabetes with diabetic peripheral angiopathy without gangrene
  - ✓ **E11.51** – Type 2 diabetes with diabetic peripheral angiopathy without gangrene

**Note:** The NEC categories such as E11.59 (Type 2 diabetes mellitus with other circulatory complications) do not apply to the "with" ICD-10-CM guideline according to AHA Coding Clinic® 4th quarter 2017.

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# CDI Tips for PAD / PVD

HPI:
→ Diagnostic statement with current status of PAD / PVD. Atherosclerotic disease is a progressive disease. Therefore, avoid documenting "history of peripheral vascular disease" and instead consider "known peripheral arterial disease." Include all co-existing conditions that impact the care management and treatment of the patient.

ROS:
→ Document the presence or absence of any current symptoms related to PAD / PVD (e.g., cold extremities, intermittent claudication, rest pain, etc.).

Common Exam Findings:
→ Diminished pulses, hair loss, skin discoloration…

Treatment Plan:
→ Document a clear and specific treatment plan.
→ Clearly link PVD to medications that are being used to treat the condition.
→ Include orders for diagnostic testing.
→ Document to whom/where referrals or consultation requests are made.
→ Note the date of the patient's next appointment.

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# CDI and Coding Tips for Atherosclerosis

**Clinical Documentation:**

- ✓ Site - Identify affected vein/artery (aorta, renal artery, etc.)
- ✓ Note whether the vein/artery is native or a graft (and type of graft if known)
- ✓ Laterality – right, left or bilateral
- ✓ Complications - (ex. Intermittent claudication, ulceration or rest pain)
- ✓ Treatment Plan – medication, diet, exercise, referral…

**Common ICD-10 Codes:**

- Atherosclerosis of aorta – I70.0
- Atherosclerosis of the renal artery – I70.1
- Atherosclerosis of the lower extremities, bil – I70.203
- Tortuous aorta – I77.1
- Thoracic aortic ectasia – I77.810
- Abdominal aortic ectasia - I77.811
- Thoracoabdominal aortic ectasia - I77.812

Arteriosclerosis and atherosclerosis may be used interchangeably for documentation and coding purposes.

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# DVTs: Acute, Chronic or History Of…

**Acute DVT**

- A DVT is considered acute at the time of onset or initial diagnosis, requiring the patient to start anticoagulation therapy.

**Chronic DVT**

- A clot that is several months old is called "chronic." The clot becomes harder and scars the vein. As a result of this process, the vein becomes much smaller and does not allow blood to flow through effectively.
- REPEAT Radiologic studies confirms persistent clot > four weeks.
- Patients with chronic DVT experience leg swelling, pain, and often skin discoloration of the leg below the knee. These patients are often prescribed compression stockings in order to help with these symptoms.

**Personal History of DVT**

- No evidence of an acute or chronic DVT

**CDI TIPS for DVTs**

- ✓ Diagnostic Statement: include the date of onset.
- ✓ Acuity: acute, chronic, or historical
- ✓ Specific Location: extremity, vessel and laterality
- ✓ Associated Symptoms
- ✓ Diagnostic Test Results
- ✓ Treatment Plan: The cornerstone of treatment is anticoagulation.
- → If anticoagulation is contraindicated, document medical decision making.

https://stanfordhealthcare.org/medical-conditions/blood-heart-circulation/deep-vein-thrombosis/types/chronic-dvt.html

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# Chronic Obstructive Pulmonary Disease

- COPD is the 3rd leading cause of mortality in the U.S.
- The National Heart, Lung, and Blood Institute estimated in the U.S. there are:
  - ✓ 14.8 million people with physician-diagnosed COPD
  - ✓ 12 million with undiagnosed COPD
- In the U.S., COPD results in (each year):
  - ✓ 15.4 million physician visits,
  - ✓ 1.5 million emergency department (ED) visits,
  - ✓ 726,000 hospitalizations

| | |
|---|---|
| J41.0 | Simple chronic bronchitis |
| J41.1 | Mucopurulent chronic bronchitis |
| J41.8 | Mixed simple and mucopurulent chronic bronchitis |
| J42 | Unspecified chronic bronchitis |
| J43.1 | Panlobular emphysema |
| J43.2 | Centrilobular emphysema |
| J43.8 | Other emphysema |
| J43.9 | Emphysema, unspecified |
| J44.0 | COPD with (acute) lower respiratory infection |
| J44.1 | COPD with (acute) exacerbation |
| J44.9 | COPD, unspecified |

- Health care costs for COPD are not only from treatment of exacerbations, such as hospitalization, but also medication costs for maintenance therapy and outpatient treatment.
- Delays in diagnosis may result in quicker progression of COPD and inefficient or inappropriate consumption of health care services as diagnosis usually occurs when a patient has lost 50% or more of original lung capacity.

https://www.ahajournals.org/doi/10.1161/CIRCRESAHA.120.316340

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# Medical Record Review

**HPI:**
**Chronic Obstructive Pulmonary Disease:**
The patient presents for follow-up of COPD which was diagnosed a year ago, by the patient's pulmonologist, considered mild at diagnosis. Medication(s) include albuterol and Spiriva. Response to medication(s) has been good.

**A/P:** J44.9, COPD – Repeat PFTs next year. Meds refilled. Return in 3 months for AWV.

**HPI:**
**Asthma:**
The patient presents for follow-up of Asthma. Needs a refill on her Albuterol. No other complaints today.

**A/P:** J44.9, COPD – Albuterol refilled. Return as needed.

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# Chronic Kidney Disease

**Instructional Notes Advise:**

**Code first** any associated:

- Diabetic chronic kidney disease (EØ8.22, EØ9.22, E1Ø.22, E11.22, E13.22)
- Hypertensive chronic kidney disease (I12.-, I13.-)

## CKD Detection

To prevent the progression of kidney disease, early detection and treatment are key.

eGFR is the best test for staging CKD

| Stage | Loss of Kidney Function | GFR | ICD-10 Code |
|---|---|---|---|
| 1 | Normal | 90 + | N18.1 |
| 2 | Mild | 60-89 | N18.2 |
| 3a | Mild to Moderate | 44-59 | N18.31 |
| 3b | Moderate to Severe | 30-44 | N18.32 |
| 4 | Severe | 15-29 | N18.4 |
| 5 | Failure | < 15 | N18.5 |

Code also for dialysis status w/ ESRD (N18.6)

**Stage 1 and 2* also require other evidence of renal disease (proteinuria, evidence of structural damage on imaging, etc.)

* When the medical record **does not document** the stage of CKD, code **N18.9** *(chronic kidney disease, unspecified)* is assigned.

**Use a Combination Code When a Patient has CKD and…**

- ❑ Hypertension
- ❑ Diabetes
- ❑ Heart Disease
- ❑ Heart Failure

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# Tips and Tricks for Success



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# Clarify: Active vs. History Of

| Clinical Documentation | Coder and CMS Interpretation |
|---|---|
| H/O CHF | CHF has **resolved** |
| CHF Compensated | CHF is **active and stable** |
| History of Angina | Angina has **resolved** (no longer exists) |
| Stable Angina, Nitrostat PRN | Angina is **active** |
| H/O A. Fib | A. Fib has **resolved** |
| A. Fib controlled on Digoxin | A. Fib is **active and stable** |

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# Be Definitive - Words Matter…

**"Unconfirmed" and/or "Inconclusive" Documentation**

- Possible
- Probable
- Suspected
- Likely
- Questionable
- Appears to be
- Rule Out
- Working Diagnosis of
- Consistent with
- Compatible with
- Comparable with
- Suspicious of

These can not be coded in the outpatient setting.

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# Communicate Severity of Illness…

- Document and code (to the highest degree of specificity) for all co-existing conditions that impact the care, management and treatment of the patient.

- History of A. Fib
- History of CHF
- History of Diabetes
- History of Depression
- History of Chest Pain
- Chronic Cough
- Presence of Cardiac Pacemaker
- Long Term Use of Anticoagulants
- Renal insufficiency
- History of Alcoholism
- History of Seizures
- Uncontrolled Diabetes
- Anxiety / Depression
- Cardiac Arrythmia, Unspecified
- Dependence on Supplemental Oxygen
- History of SSS
- Low platelet count
- CKD

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