

Blue Cross Blue Shield of Massachusetts is an Independent Licenses of the Blue Cross and Blue Shield Association

# **Medical Policy**

# **Ultrafiltration in Decompensated Heart Failure**

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**Policy Number: 542** 

BCBSA Reference Number: 2.02.22

NCD/LCD: NA

#### **Related Policies**

None

## **Policy**

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO Blue<sup>SM</sup> and Medicare PPO Blue<sup>SM</sup> Members

The use of ultrafiltration is considered **INVESTIGATIONAL** in patients with heart failure.

#### **Prior Authorization Information**

### Inpatient

 For services described in this policy, precertification/preauthorization <u>IS REQUIRED</u> for all products if the procedure is performed <u>inpatient</u>.

## Outpatient

For services described in this policy, see below for products where prior authorization <u>might be</u> <u>required</u> if the procedure is performed <u>outpatient</u>.

	Outpatient
Commercial Managed Care (HMO and POS)	This is <b>not</b> a covered service.
Commercial PPO and Indemnity	This is <b>not</b> a covered service.
Medicare HMO Blue <sup>SM</sup>	This is <b>not</b> a covered service.
Medicare PPO Blue <sup>SM</sup>	This is <b>not</b> a covered service.

### **CPT Codes / HCPCS Codes / ICD Codes**

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

#### **CPT Codes**

There is no specific CPT code for this service.

## **Description**

#### **Heart Failure**

Heart failure is a relatively common condition that frequently results in hospitalizations and readmissions.

#### **Treatment**

Various treatment approaches are being explored, especially when the condition is refractory to conventional therapy. Ultrafiltration, also referred to as aquapheresis, is a technique being investigated for a possible role in hospitalized patients with marked volume overload from heart failure. It is used to remove fluid from the blood via pressure differentials during treatment with a dialysis machine or similar filtration device.

It has been suggested that ultrafiltration may offer greater and more expeditious volume and sodium removal than conventional therapies, particularly in patients with decompensated heart failure whose fluid overload is unresponsive to medical management.

Newer devices that allow continuous ultrafiltration in ambulatory patients are under investigation to reduce volume overload.

#### **Outcome Measures**

Heart failure is a condition with a variable natural history and multiple confounders of outcome. Clinical outcomes of interest in the treatment of heart failure include survival, hospitalization, complications, and quality of life; although removal of fluid and sodium, and weight loss, are important, they are surrogate outcomes that do not necessarily translate into clinical outcomes. Because ultrafiltration does not directly affect ventricular function, its effect on clinical outcomes is difficult to evaluate.

#### Summary

Ultrafiltration is used to remove excess fluid from patients with volume overload and heart failure. It removes fluid from the blood by using pressure differentials with dialysis equipment or similar filtration devices.

For individuals who have decompensated heart failure who receive ultrafiltration, the evidence includes randomized controlled trials (RCTs) and systematic reviews. Relevant outcomes are overall survival, quality of life, hospitalizations, and treatment-related morbidity. A number of RCTs and meta-analyses of these controlled trials have been published. Meta-analyses did not find significant differences in all-cause mortality in patients receiving ultrafiltration or diuretics, and nearly all meta-analyses found no significant between-group differences in rehospitalization rates. RCTs and meta-analysis found that patients undergoing ultrafiltration had significantly greater weight loss and more fluid removal than diuretic therapy. Although pooled analyses of randomized controlled trials did not find significant differences in adverse events in groups receiving ultrafiltration or diuretics, some RCTs (eg, CARESS, AVOID-HR) have reported higher rates of adverse events after ultrafiltration, including significant worsening of renal function and treatment-related serious adverse events. The available trials have several methodologic limitations (eg, unblinded outcome assessment, incomplete information on patient status). Moreover, long-term outcomes (ie, >1 year) have not been reported. The evidence is insufficient to determine the effects of the technology on health outcomes.

## **Policy History**

Date	Action
7/2020	BCBSA National medical policy review. Description, summary and references
	updated. Policy statements unchanged.

6/2019	BCBSA National medical policy review. Description, summary and references
	updated. Policy statements unchanged.
6/2017	New references added from BCBSA National medical policy.
7/2016	New references added from BCBSA National medical policy.
8/2015	New references added from BCBSA National medical policy.
9/2014	New references added from BCBSA National medical policy.
8/2013	New references from BCBSA National medical policy.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates.
	No changes to policy statements.
4/2011	Reviewed - Medical Policy Group – Cardiology and Pulmonology.
	No changes to policy statements.
10/20/2010	New medical policy effective 10/20/2010 describing ongoing non-coverage.

## Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

Medical Policy Terms of Use

Managed Care Guidelines

Indemnity/PPO Guidelines

**Clinical Exception Process** 

Medical Technology Assessment Guidelines

#### References

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