

Identification of Cardiac Risk Factors in High-Risk Pregnancies

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BACKGROUND

- High-risk pregnancies are prominent in California’s Central Valley. Many develop major cardiovascular complications and there’s a need to screen for these patients.
- However, there are overlapping symptoms between normal pregnancy and cardiovascular disease.
- The 2017 California Maternal Quality Care Collaborative (CMQCC) toolkit helped stratify high-risk pregnant patients for initial cardiac work up (Figure 1).

CLINICAL QUESTION

- Can retrospective application of the 2017 CMQCC screening tool for cardiovascular disease in addition to a collection of different variables allow modification to improve specificity?

METHODS

- Retrospective chart review of all pregnant patients admitted by OB-GYN department at CRMC from April 2017-April 2019.
- Application of the 2017 CQMCC toolkit on these patient population.

RESULTS

- A total of 442 patients qualified for the study and a sample patient population were considered for data analysis (Figure 2 & 3).

DISCUSSION

- The 2017 CMQCC toolkit appears to have a high sensitivity and moderate specificity.
- Pregnant patients with a positive screen should have a cardiology consult or further cardiac work up. We suspect many patients developed cardiovascular complications but were captured in the chart.
- Limitations include small sample size and narrow generalizability. Further analysis to address these issues and achieve study’s aim.

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Key Takeaway: Pregnant or postpartum patients who have a positive CMQCC screen for cardiovascular disease should receive a cardiology consult or have further cardiac work up to assess for future cardiac complications.



Figure 1. CMQCC assessment for patients with no red flags and/or no personal history of CVD.

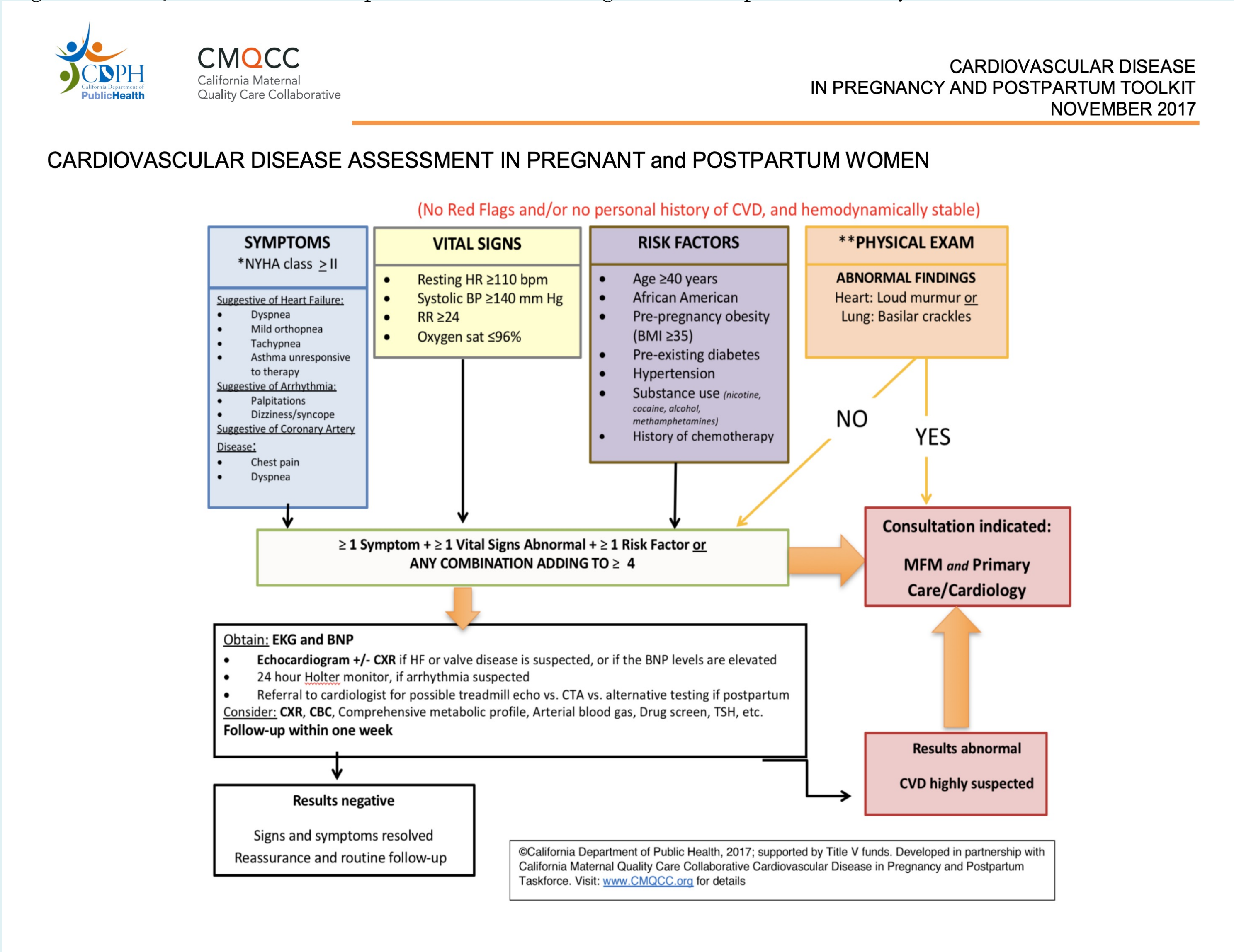


Figure 3. Contingency table of the 2017 CMQCC screening tool for patients diagnosed with heart failure

		Patients diagnosed with heart failure at discharge		
		Yes	No	Total
2017 CMQCC screening tool	Positive	5	11	16
	Negative	0	32	32
	Total	5	43	48
Sensitivity		1.00		
Specificity		0.744		

Figure 2. Results for the sample patient population.

