

## Congenital heart disease: Achieving superior outcomes while managing costs

About 40,000 children are born with congenital heart defects every year in the U.S., many requiring multiple surgeries and a lifetime of medications to keep their hearts working.<sup>1</sup> For payers and self-funded employers, congenital heart disease (CHD) is a low-incidence but a high-cost and clinically complex condition that can take a heavy financial toll. Because it occurs so infrequently, many case managers may not be familiar with the condition or know how to identify it.

### About congenital heart disease

CHD is a type of malformation in one or more structures of the heart or blood vessels that occurs before birth. There are many different types of congenital heart defects. They range from simple defects with no symptoms to complex defects with severe, life-threatening symptoms.

### Early identification

The timing of a CHD diagnosis is crucial to a case manager's ability to provide a member with education about facility choices and clinical outcomes.

- Early identification — or identifying a CHD case in utero — grants the most ideal opportunity for COE education and referrals.
- A case identified after birth that does not require immediate surgery provides the opportunity to educate the member about COE facilities.
- A case identified after birth in which surgery must occur immediately is less likely to move to a different facility due to the baby's fragile state of health.

Of these three scenarios, early identification provides the best opportunity for COE education impact.

### Harness the advantage of Centers of Excellence

Optum Congenital Heart Disease Resource Services (CHDRS) is a program that identifies and qualifies hospitals that treat CHD, creating the industry-leading CHD Centers of Excellence (COE) network.

### Specialized CHD network

CHD is a relatively rare condition. Very few facilities capture enough volume to develop the expertise and experience required to consistently deliver superior outcomes. Out of the medical centers Optum surveys, only 25 have sufficient volume and experience to meet our clinical qualification criteria. In fact, both Optum COE qualification survey data and external clinical studies demonstrate a strong correlation between volume and clinical outcomes.



### The high cost of CHD

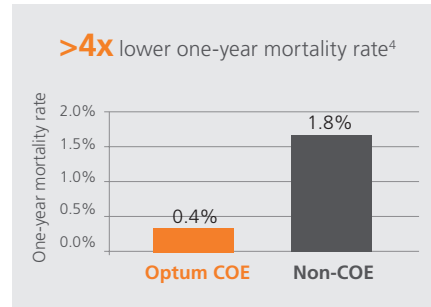
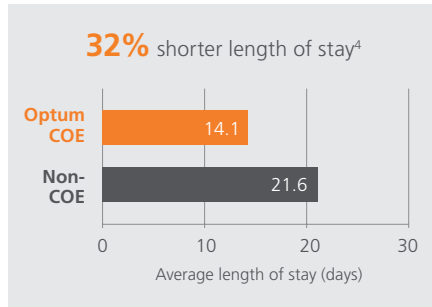
- **\$404,000** average billed charges for CHD case<sup>2</sup>
- **\$19.5 million** expected annual CHD billed charges per million members<sup>2</sup>

### CHD diagnosis examples

- Coarctation of the aorta
- Double-outlet right ventricle
- Transposition of the great arteries
- Ebstein's anomaly
- Hypoplastic left heart syndrome
- Interrupted aortic arch
- Pulmonary atresia
- Single ventricle
- Tetralogy of Fallot
- Tricuspid atresia
- Truncus arteriosus

## Better quality, lower cost

Our claims data reveal that COE programs deliver better clinical outcomes while reducing average lengths of stay and overall charges, as illustrated below. This is consistent with our premise that high volumes build expertise to do things better and more efficiently.



## Considerations for payers and self-funded employers

- Do you know your historical spend on CHD management in your membership?
- What clinical and network strategy do you have for managing CHD?
- With whom do you partner to adequately identify and manage CHD in your membership?

### Sources:

1. Centers for Disease Control. Congenital heart defects (CHDs): Data & statistics. Last updated December 22, 2015. Accessed January 13, 2016. Citing: Hoffman JL, Kaplan S. The incidence of congenital heart disease. *J Am Coll Cardiol.* 2002;39(12):1890–1900. And Reller MD, Strickland MJ, Riehle-Colarusso T, Mahle WT, Correa A. Prevalence of congenital heart defects in Atlanta, 1998–2005. *J Pediatr.* 2008;153:807–13.
2. Tao. UnitedHealthcare commercial population 2011–2014. November 2015.
3. Chen. Optum CHD contract comparison data 2011–2014. November 2015. Accessed January 2016.
4. Tao. UnitedHealthcare commercial population 2011–2014. November 2015. Outlier cases exclude based upon LOS for all RACHS categories except RACHS 6 in order to show performance of center rather and to eliminate skews from high-acuity cases.

The Centers of Excellence (COE) program providers and medical centers are independent contractors who render care and treatment to health plan members. The COE program does not provide direct healthcare services or practice medicine, and the COE providers and medical centers are solely responsible for medical judgments and related treatments. The COE program is not liable for any act or omission, including negligence, committed by any independent contracted healthcare professional or medical center.

## Optum congenital heart disease COEs deliver

**37%**  
average  
contractual  
savings<sup>3</sup>

**\$83,000**  
estimated  
reduction  
in billed charges  
due to reduced  
length of stay<sup>4</sup>

For more information, contact your Optum representative, call **1-866-386-3404** or email us at **info@optum.com**.