

It's Time to Move On Kid:

The Meaning of Transition in Congenital Heart Disease



#### Deena Barber BSN RN

Nurse Program Coordinator
Adult Congenital Heart Disease
The Heart Center
Akron Children's Hospital

Unfortunately...

I have no actual or potential conflict of interest in relation to this program/presentation.



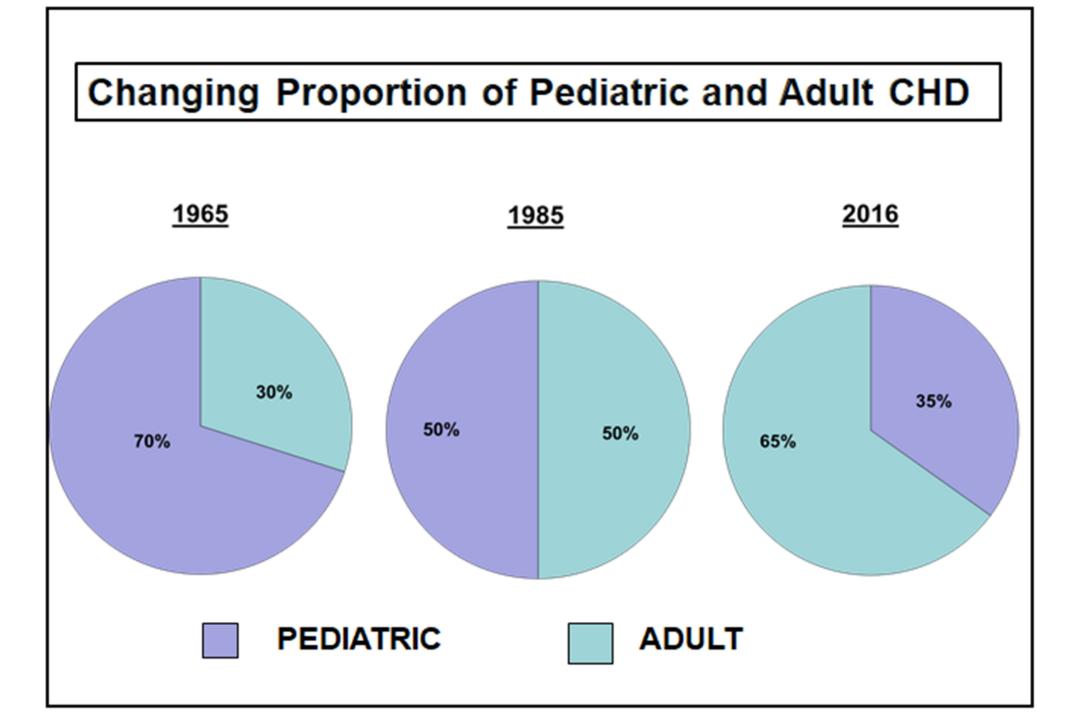
#### **Objectives**

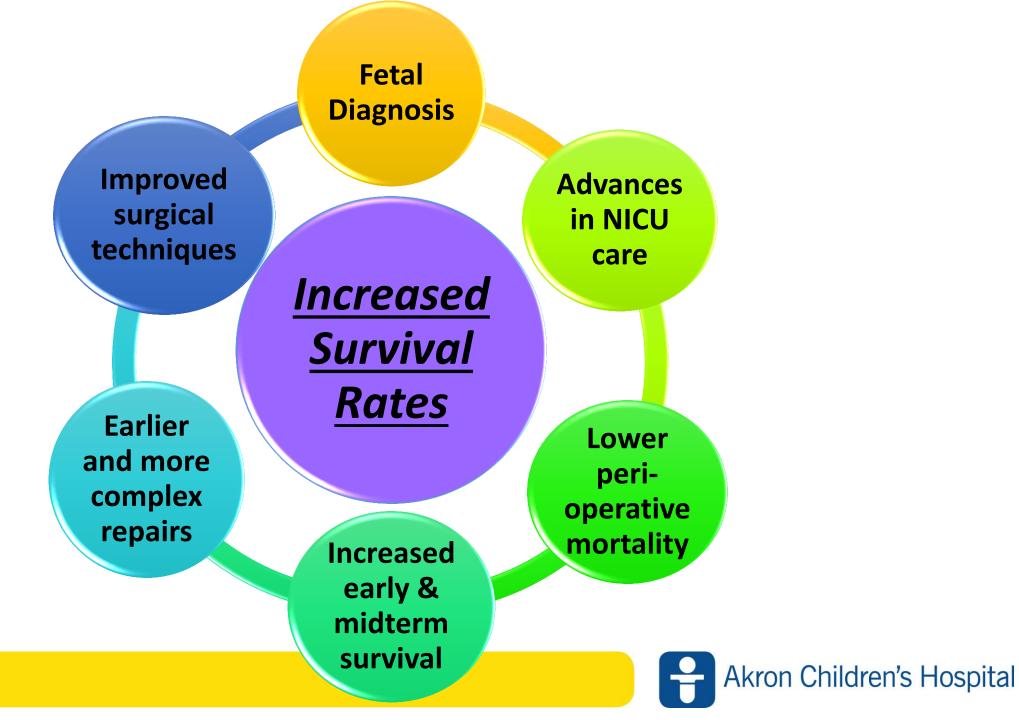
- Identify the number of pediatric and adult patients living with congenital cardiac defects, and acquire an understanding of the need for specialized adult congenital heart disease(ACHD) care
- Differentiate between transition in congenital heart disease and transfer of care from pediatric to adult providers
- Recognize the positive impact the Pediatric Primary Care Provider has on continuity of care for the transitioning congenital heart disease patient



# WHO? 1 million children and

1.5+ million adults
living with congenital heart disease
in the United States



























































Starting at 12 years of age

Akron Children's Hospital

# WHAT??

# Health Care Transition (HCT)

the purposeful, planned movement of adolescents and young adults with chronic physical and medical conditions from child-centered to adult-oriented health-care systems



### **Transfer** of Care

the movement of patients and their care from one medical facility or provider to another.

### **Transition**

is a planned educational process that occurs over *many* visits and years

### <u>Transfer</u>

is a change from one provider to another; it is often *unplanned and abrupt* 



# Health Care Transition? Or Transfer of Care?

• 20 y.o. female, hx "valve problem" since birth

Seen 5 years ago by pediatric cardiologist

Follow-up in 2 years was recommended

 Calling your office for referral to "adult heart doctor" at request of OB/GYN



And she is pregnant

Where should she go for her cardiac care??

Is this HCT or Transfer??



 Referral to Adult Congenital Heart Service at Akron Children's Heart Center

Diagnosis is Bicuspid Aortic Valve with dilated aorta

Followed closely during pregnancy along with MFM

Delivered a few weeks early; open heart surgery within 6 weeks of delivery

Akron Children's Hospital

• 14 y.o. female, single ventricle patient

Pediatric Cardiology follow-up every 6 months

 Mother called before appointment with questions about support groups, prognosis, lifestyle choices and contraception questions



 Pediatric Cardiologist introduced ACHD coordinator and Transition was started

Patient remains in care of her pediatric cardiologist

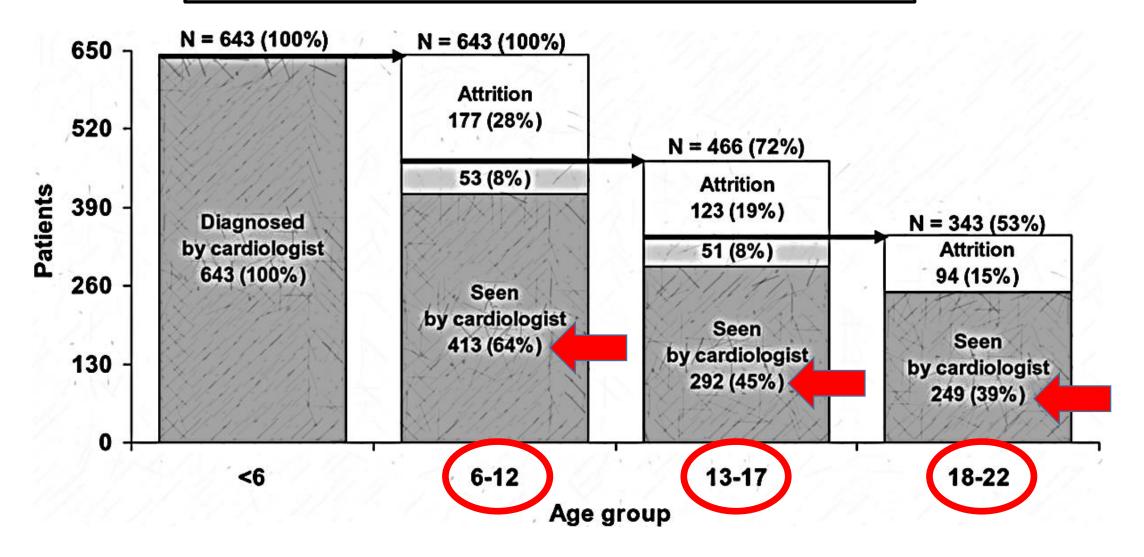
Akron Children's Hospital

 Resources provided for educational needs and continued enforcement of need for lifelong congenital cardiac care

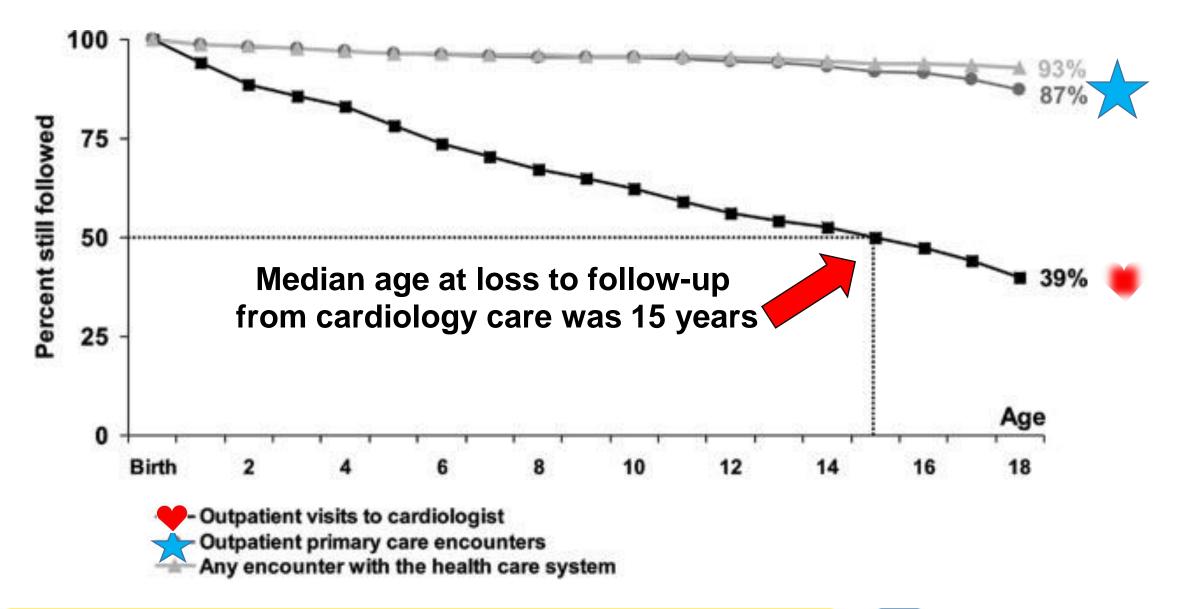
# WHEN??

- Start the process early
- Recommend by age 12 years
- Include the parents/caregivers
- Envision a future at time of diagnosis and with each visit
- Start the process EARLY!!

#### Loss of follow-up from age 6 to 22 years







### WHEN??

### Start EARLY!!!

# WHERE??



# WHY??

• It is the right thing to do

Congenital heart disease is a chronic condition

Congenital Heart Disease patients require
 lifelong specialized congenital cardiac care





Patients with gaps in medical care have increased morbidity and mortality

First major gap in medical care occurs in late teen years



# WHY??

- Patients with lapse of medical care (≥ 2 years) are 3 times more likely to require urgent cardiac intervention
- 60% of patients had new diagnosis of hemodynamic significance on initial visit to adult congenital care after lapse or gap in care

# HOW??

### **Transition**

is a planned educational process that occurs over *many* visits and years

Name of congenital heart disease, native anatomy



Interventions, procedures and surgeries

Current anatomy and physiologic state

Pacemaker, defibrillator, stents, coils in place



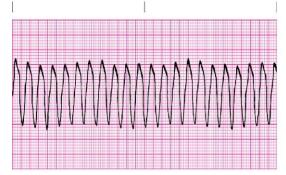


Residual hemodynamic considerations and issues to be anticipated based on individual's CHD

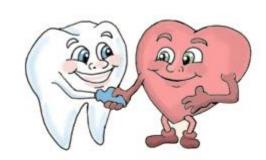
Symptoms and how to respond; who to call and when



Arrhythmia considerations; risks, signs and symptoms



Endocarditis considerations:
 Risks, implications, recognition, response, prevention



 Non cardiac surgery considerations and risks; location of surgery, knowledge and skills of surgical team

 Non cardiac medical problems; importance of Primary Care Provider

Access to appropriate care; is an ACHD center nearby?
 (HINT\* Akron Children's Heart Center\*!)

Marriage and family planning



Contraception and pregnancy planning

Contraceptive options and risks



Risks of pregnancy to mother and to fetus

Management of pregnancy plan



Career, vocational, and insurance planning; health insurance, life insurance



Lifestyle issues; tattoos, body piercings



High-risk behaviors and additional risks for CHD patients;
 alcohol and Fontan, tobacco, recreational drugs





Physical fitness recommendations; Exercise Prescription

Activity restrictions





 Relative safety of exercise and hobbies; Skydiving? Roller Coasters? Rock climbing? Weight lifting?



Education, Employment





Self-advocacy, Self-care

 Legal concerns; guardianship, Medical Power of Attorney, Advanced Directives



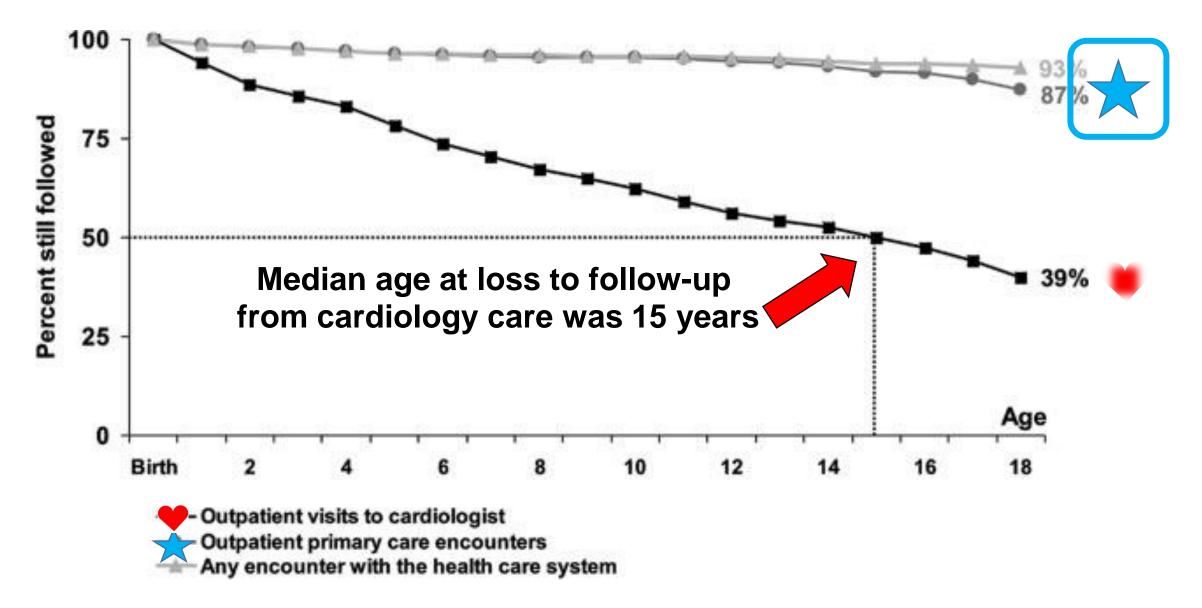
# HOW??

Transition can only occur if we have the patients to transition

This is where you come in...

### How can YOU help?





#### **Reasons for Return to Cardiac Care**

Reason for Return	n to Care				}	/es (%)	
Desire to prevent potential problems				70			
_		•	_ •				

#### Recommendation from other health care provider 65

New symptoms or health problem(s)	53
Recommendation from family/friends	47
Desire to learn more about my heart	46
Concern about potential deterioration	45
New health insurance	26
Emergency department visit	23
Other life changes (e.g., marriage, new job)	23
Better financial situation	19
Interest in getting pregnant	14
New adult CHD care services available	7
Recommendation from health advocacy group	6
Media story on CHD	3



# HOW??

- Remind your patients at each encounter to continue care with pediatric cardiology
- Primary Care Provider one of main reasons patients return to care
- Lapse of care increases morbidity and mortality



Dr. John Lane,
Director and ACHD cardiologist

Dr. Ashish P. Saini, ACHD cardiologist

Kristen Breedlove, PA-C

Fran Feesler, FNP

Deena Barber, BSN RN ACHD Coordinator

Sheryl Jones,
Office Coordinator



Blum RW, Garell D, Hodgman CH, Jorissen TW, Okinow NA, Orr DP, Slap GB. Transition from child-centered to adult health-care systems for adolescents with chronic conditions: a position paper of the Society for Adolescent Medicine. *J Adolesc Health*. 1993;14:570 –576.

Gurvitz M, MD, Valente AM, MD, Broberg C, Cook S, Stout K, Kay J, MD, Ting, Kuehl K, Earing M, Webb G, Houser L, Opotowsky A, Harmon A, Graham D, Khairy P, Gianola A, Verstappen A, Landzberg M. Prevalence and Predictors of Gaps in Care Among Adult Congenital Heart Disease Patients HEART-ACHD (The Health, Education, and Access Research Trial). *Journal of the American College of Cardiology*. 2013;61:2180–4)

Mackie AS, Ionescu-Ittu R, Therrien J, Louise Pilote L, Abrahamowicz M; Marelli A, Children and Adults With Congenital Heart Disease Lost to Follow-Up Who and When?. *Circulation*. 2009;120:302-309.

Mackie A, Rempel G, Rankin K, Nicholas D, Magill-Evans J. Risk factors for loss to follow-up among children and young adults with congenital heart disease. *Cardiology in the Young* (2012), 22, 307–315.

Reiss JG, Gibson RW, Walker LR. Health care transition: youth, family, and provider perspectives. *Pediatrics*. 2005;115:112–120.



Sable C, Co-Chair, Foster E, Uzark K, Co-Chair, Bjornsen K, Canobbio M, RN, Connolly H, Graham T, Gurvitz M, Kovacs A, Meadows A, Reid G, Reiss J, Rosenbaum K, Sagerman P, Saidi A, Schonberg R, Shah S, Tong E, Williams R; on behalf of the American Heart Association Congenital Heart Defects Committee of the Council on Cardiovascular Disease in the Young, Council on Cardiovascular Nursing, Council on Clinical Cardiology, and Council on Peripheral Vascular Disease. Best Practices in Managing Transition to Adulthood for Adolescents With Congenital Heart Disease: The Transition Process and Medical and Psychosocial Issues. A Scientific Statement From the American Heart Association. *Circulation*. 2011;123:1454-1485.

Saidi A, Kovacs, A. Developing a Transition Program from Pediatric- to Adult-Focused Cardiology Care: Practical Considerations. *Congenital Heart Disease*. 2009;4:204–215

Williams RG, Pearson GD, Barst RJ, Child JS, del Nido P, Gersony WM, Kuehl KS, Landzberg MJ, Myerson M, Neish SR, Sahn DJ, Verstappen A, Warnes CA, Webb CL; National Heart, Lung, and Blood Institute; Working Group on research in adult congenital heart disease. *Journal of the American College of Cardiology*. 2006 Feb 21;47(4):701-7.

Yeung E, Kay J, Roosevelt G, Brandon M, Yetman A. Lapse of care as a predictor for morbidity in adults with Congenital heart disease. *International Journal of Cardiology* 125 (2008) 62–65.



#### About Akron Children's

- Ranked a Best Children's Hospital by U.S. News & World Report
- Magnet® Recognition for Nursing Excellence
- Largest independent pediatric provider in northern Ohio
  - 2 hospital campuses
  - 60+ locations offering primary care, specialty services and urgent care
  - 5,800 employees
- With more than 1 million patient visits each year, we've been leading the way to healthier futures for children and communities through expert medical care, prevention and wellness programs since 1890.

