Pediatric family health history: a genetic screening and clinical decision support tool

March 13, 2014
Implementation Webinar for Genetic Counselors

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Acknowledgements & Disclosure

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The Pediatric Family Health History Tool is to be used by qualified healthcare providers for informational and educational purposes only and is not intended to replace or overrule the qualified healthcare provider’s judgment or clinical diagnosis.
Objectives

1. Recognize the clinical conditions and clinical decision support in the new Pediatric Family History Tool and explore the functionalities of the tool through a live demonstration

2. Identify strategies, opportunities, and immediate next steps for implementation of the tool

3. Review lessons learned from a national quality improvement project on the integration of genetics into pediatric primary care practice
The Pediatric Family History Tool

- Helps the busy primary care provider translated family history data for clinical care
-Engages the family as an active participant
-Provides a personalized clinical encounter with clinical decision support
-Adaptation of previously developed Pregnancy & Health Profile for prenatal providers
Implementation: Clinic Flow

Pre-Encounter

1. Parent enters history

Clinical Encounter

2. Electronic risk assessment
3. Clinician reviews report
4. Shared decision making
5. Clinician documentation

Images attributed as follows: Doctor designed by Andrew McKinley, from The Noun Project.
Patient Care Benefits

• Saves time during provider encounter
• Yields more detailed data
• Instantly runs clinical decision support based on professional guidelines
• Electronically collects information
Conditions

- Aligned with current practice of collection
- Supported by practice guidelines and/or literature
- Actionable

Complex
- Intellectual disability
- Mental Illness
- Cardiovascular disease

Mendelian
- Hemoglobinopathies
- Cystic fibrosis
- Fragile X
Condition Selection Criteria

1. Does the condition have a known genetic cause or contribution?
2. Is family history a good screening tool for the condition?
   A. Before assessing whether or not family history is a “good” screen, we collected available information about analytic validity, clinical utility, and recurrence risks of the family history condition.
3. Is an intervention available based on identification of increased risk? What is the intervention?
4. What is the public health impact of the condition?

Criteria adapted from Yoon et al., 2006
35 Conditions with Decision Support

**Complex**
- Allergies
- Asthma
- Eczema
- Intellectual disability
- Autism spectrum disorder
- ADHD
- Depression
- Bipolar disorder
- Anxiety disorder
- Substance abuse
- Schizophrenia
- Suicide
- Congenital heart defect
- Congenital hip dislocation

**Mendelian**
- Hemophilia
- Sickle cell disease
- Thalassemia
- Thrombophilia
- Von Willebrand disease
- CF
- Fragile X

- Congenital kidney disease
- Deafness
- Seizures
- Thyroid disease
- Celiac disease
- IBD or Crohn’s
- Cancer
- Cardiovascular disease
- Stroke
- High cholesterol
- High blood pressure
- Diabetes
- Sudden death, SIDs
- Bleeding disorders
Example Algorithms

If patient has >2 maternal FDR, SDR, or TDR with a learning disability or special education, developmental delay, intellectual disability, AND/OR autism spectrum disorder, THEN →

<table>
<thead>
<tr>
<th>Syndrome/Condition</th>
<th>Action</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fragile X syndrome</td>
<td>Assess family for Fragile X syndrome. Consider referral for affected individual(s) for comprehensive evaluation and familial risk assessment (genetics/developmental peds/neurology).</td>
<td>Patient has multiple maternal family members with developmental delay, intellectual disability, learning disability or special education, and/or autism.</td>
</tr>
</tbody>
</table>

If patient has 1 FDR with autism spectrum disorder, THEN →

<table>
<thead>
<tr>
<th>Syndrome/Condition</th>
<th>Action</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autism spectrum disorder</td>
<td>Screen for autism spectrum disorder.</td>
<td>Patient has a family history of autism spectrum disorder.</td>
</tr>
</tbody>
</table>
Tool Demonstration

- Patient Questionnaire
- Provider Report
- Provider Interface
Patient Questionnaire

Welcome to the Pediatric Family Health History Questionnaire

If the information below is not you/your child, please click the ‘Not Me/My child’ button and return the tablet to the reception desk. If this is you or your child, please click the ‘Next’ button to begin the questionnaire.

Unit Number: 999061713002
Patient Name: Bobbie Test
Date of Birth: 01/01/2010

Not Me/My Child

Next
If patient has 1 FDR with autism spectrum disorder, THEN →

<table>
<thead>
<tr>
<th>Considerations:</th>
<th>Syndrome/Condition</th>
<th>Action</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autism spectrum disorder</td>
<td>Screen for autism spectrum disorder.</td>
<td>Patient has a family history of autism spectrum disorder.</td>
<td></td>
</tr>
<tr>
<td>CONSIDERATIONS FOR THE PATIENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For infants, counsel the parents about the benefits of breastfeeding because of the child’s increased risk of atopy. Counsel about the increased risk and potential preventative measures that can reduce risk.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screen patient for autism spectrum disorder (ASD). Assess family for inherited form of ASD and intellectual disability. Consider referral for affected individual(s) for comprehensive evaluation and familial risk assessment (genetics/developmental pediatrics).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient is at increased risk for CVD. Evaluate patient for other CVD risk factors (hypertension, hypercholesterolemia, diabetes, obesity, and smoking) per NHSLI guidelines. Educate family about the importance of this family history and risk factors in disease risk.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACTION</td>
<td>SYNDROME/CONDITION</td>
<td>REASON</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Atopic conditions</td>
<td>Patient has a family history of atopic disease.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Autism spectrum disorder</td>
<td>Patient has multiple family members with ASD and intellectual disability.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cardiovascular disease (CVD)</td>
<td>Patient has a family history of hypercholesterolemia.</td>
<td></td>
</tr>
</tbody>
</table>
Provider Interface
Demonstration
Clinical Implementation: Resources

- **Site resources**
  - IT staff
  - Clinical coordinator
  - Computers and printer
  - Server
  - Wireless
  - Physical space

- **Project resources**
  - IT support: develop local installation plan with site IT staff, technical assistance
  - Clinical support: education and training, customized workflow, technical assistance
Clinical Implementation: Current IT Solution

- Customized for site
- Project staff works with site IT staff to install, fee for service
- SQL database on site server or hard drive
- Wireless connection to tablet, laptop, or desktop computer with patient interface software installed (pt. questionnaire)
- Patient-entered data is stored in database, not on computer
- Providers can have access to database through a clinician portal on desktop in office
- Wireless connection to office printer for automated printing of family history report
- Does not automatically interact with EHR at baseline
Implementation Checklist

- Onsite clinician & IT buy-in
- Tool installation & technical assistance
- Clinic flow & staff roles
- Training
- Launch
- Monitor
Implementation Checklist

- Onsite clinical & IT buy-in
  - 1-4 months
  - Present on tool and project to site leadership and key stakeholders
  - Meetings to assess interest, feasibility, and commitment from site clinicians, IT, and administrators
  - Identify the primary coordinator, clinicians, and other key participants
  - May include needs assessment

http://www.geneticsinprimarycare.org/YourPractice/Family-Health-History/Pages/Family-History-Tool-for-Pediatric-Providers.aspx
Is this going to be the project url?
Emily Edelman, 11/17/2013
Implementation Checklist

- **Tool installation & technical assistance**

  3-6 weeks
  - Needs assessment of existing resources, IT infrastructure, and clinic flow and processes
  - Agreement with Hughes riskapps for support, if needed
  - Meetings with stakeholders include IT staff and administrators to develop customized installation plan
  - Installation, remote or in-person
  - Test and provide technical assistance as needed
Implementation Checklist

☐ **Clinic flow & staff roles**

4-6 weeks

☐ Needs assessment of existing resources, IT infrastructure, and clinic flow and processes

☐ Meetings with site coordinator and lead to develop customized training, education, clinical support, and patient communication plans

☐ Plan for integration of tool into clinical workflow

☐ Plan for assessment and audit during implementation

☐ **Training**

1-2 weeks
Implementation Checklist

- Launch

- Monitor
  - Check-in after 1-2 patients
  - Regular intervals
Staffing

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Bruce Lin  (Siobhan Dolan

Brian Drohan  (bdrohan@partners.org), Kevin Hughes

James O’Leary

Lisa Vasquez
Integrating Genetics in Primary Care

Lessons Learned from a national Quality improvement project
Goals

Project Goals

• Increase the awareness of the importance of genetics in primary care

• Test tools and strategies related to the integration of genetics in pediatric primary care
Objectives

1. Collect, document, and discuss family history information as part of the health supervision visit for all patients age 0-21 years

2. Improve the delivery of care for pediatric patients with defined genetic conditions, using a patient registry and co-managing care with genetic professionals

3. Develop policies and improve office systems to meet the first two goals of the project
Key Areas of Change

1. Identify reasons for referral to genetics and strategies for talking with patients about these referrals
2. Understand the value of a genetic work-up on patients with identified concerns
3. Learn processes for collecting and discussing pediatric FH in practice
4. Communicate with families about FH and genetics
5. Manage patients with genetic conditions through a patient registry; providing appropriate services including:
   1. Care plans and care coordination
   2. Re-referral to genetics
   3. Transition plans
   4. Health supervision guidelines
   5. Palliative care and Emergency care plans developed and discussed
Participating Practices

- 13 teams in 11 states serving 130,000 pediatric patients annually
- Practice teams (3 people per team) include a lead physician, 1-2 other clinicians, nurse or assistant staff person
- Participated in 6 months of data collection regarding project goals

Practice demographics:
- All use an EHR
- One family physician
- Diverse range of practice type, geographic setting, and patient population
### Project Timeline

<table>
<thead>
<tr>
<th>Application Process</th>
<th>Prework</th>
<th>Action Period</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form core improvement team and determine roles of each member</td>
<td>Participate in prework call on December 18 (8 am CT) or 20 (11 am CT)</td>
<td>Participate on conference calls</td>
<td>Conduct 6 month post-project evaluation on sustainability and continued improvement</td>
</tr>
<tr>
<td>Attend informational call on October 1 or 11</td>
<td>Sign Consent Form</td>
<td>Collect monthly data (chart review, registry review, and narrative report)</td>
<td>Qualitative phone interviews</td>
</tr>
<tr>
<td>Complete project application</td>
<td>Complete baseline data</td>
<td>Test changes using PDSA cycles</td>
<td>Submit final chart review and registry review data</td>
</tr>
<tr>
<td></td>
<td>Assess current practice and systems</td>
<td>Provide feedback on tools</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Create a storyboard</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Make travel arrangements for Learning Session 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Learning Session 1
- October-November 2012
- March 8-9, 2013

#### Learning Session 2
- December 3, 2012-January 30, 2013
- April-September 2013
- November 8-9, 2013
- March 2014
Overall Program Structure

Training / Education
- Two in-person learning collaboratives
- Change Package with tools, resources, and information
- Ad-hoc education as needed

Ongoing Mentorship
- Project listserv (Expert Group Advisors)
- 1-on-1 support through regional genetic mentors
- Monthly coaching calls with QI advisor

Assessment
- Pre-post surveys
- Monthly data collection
- Post-project evaluation
Genetic Mentorship Program

Goal: To increase partnerships between PCP and genetic professionals at the local / regional level

Format:
- **Who:** A geneticist or genetic counselor paired with each practice from their region
- **What:** Meet monthly via phone, email, or in-person
- **Purpose:** Share information and resources, discuss patient cases, facilitate relationships
Case Example: Mentorship Program

Who:
- PCP - Nassim and Associates (Indiana)
- Genetic Counselor - Cecilia Rajakaruna (Louisville, Kentucky)

Goals:
1. Educating allied health staff on genetic conditions and FH
2. Tracking patients with genetic d/o
3. Integrating FH into the EHR
4. Working on care plan / creating care plans for patients
5. Developing policies and processes for genetic referrals
6. Connecting with local geneticists and allied health professionals
Results

• **Knowledge**
  – Know when to utilize services appropriately
  – Understand genetic red flags

• **Attitude**
  – 100% of participants *value* a FH and will continue to improve their processes towards collecting, storing, and updating information

• **Behavior**
  – All practices have integrated a genetics family history screening into their practice
  – Practices’ patient registries had an avg. of 300 children with heritable disorders who are now receiving improved care
Results, Cont.

• **Systems**
  – “I had never heard of a genetic counselor prior to this project”
  – “Thanks to my mentor, I now have a relationship with my local genetics center and have resources to help me when considering a referral and improved relationships with specialists to co-manage care”

• **Patient Outcomes**
  – “If it hadn’t been for this project, I never would have considered a referral to genetics without a definitive diagnosis”
  – “Positive FH screens resulted in identification of genetic conditions or referral of patient or family member to genetics”
Take Home Points

• Knowledge expanded – know when to utilize services

• Comfort in contacting genetics with a referral that they are considering

• Better understanding to the role of a genetic counselor

• Build relationships between PCP and genetics
Questions
Thank you!

About the project
www.geneticsinprimarycare.org/YourPractice/Family-Health-History/Pages/Family-History-Tool-for-Pediatric-Providers.aspx

Download the tool
www.hughesriskapps.net/Products/Software/Registration.aspx

Contact us
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Emily.edelman@jax.org
Bdrohan@partners.org
Supplemental Slides

• List of conditions
• Patient Questionnaire
• Provider Interface

Handouts

• Sample Patient Questionnaire
• Sample Provider Report
Patient Questionnaire
Patient Survey

Please login to reach a list of today's appointments.

Username: pediatric
Password: *************

Quit

Next
Patient Survey

Please select the proper patient from the list of appointments below, click the 'Next' button and then give the tablet to the patient.

<table>
<thead>
<tr>
<th>Appointment Time</th>
<th>Unit Number</th>
<th>Patient Name</th>
<th>Date of Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:15 AM</td>
<td>999061713002</td>
<td>Bobbie Test</td>
<td>01/01/2010</td>
</tr>
</tbody>
</table>

[Buttons: Refresh List, Back, Next]
Welcome to the Pediatric Family Health History Questionnaire

If the information below is not you/your child, please click the ‘Not Me/My child’ button and return the tablet to the reception desk. If this is you or your child, please click the ‘Next’ button to begin the questionnaire.

Unit Number: 999061713002
Patient Name: Bobbie Test
Date of Birth: 01/01/2010
Welcome to the Pediatric Family Health History Questionnaire

The following survey will help your medical team provide the best possible care to you or your child.

This survey will ask questions that are important for you or your child’s health. Please answer the questions as well as you can. You will have a chance to discuss the questions and your answers with your medical team later.
Are you filling out this questionnaire for your child?

☑ Yes, I am the parent or guardian

☐ No, I am the patient

If you are a parent or guardian filling out this questionnaire for your child, please answer from your child’s point of view.
Is Bobbie adopted?

- No
- Yes
- No
- Not sure
- Prefer not to answer
- Clear
Are you aware of Samantha's health history or any of the family health history of Samantha's biologic parents or other blood relatives?

- Yes
- No
- Clear

If Samantha is adopted and/or you are not aware of Samantha family's health history, you may not be able to answer some questions. But don't worry, your medical team will still provide the best possible care for Samantha today.
Bobbie's Family Health History

We will now ask about Bobbie and Bobbie’s blood relatives (biological relatives) and their health.

You will first be asked about health conditions that run in the family. Then you will be asked to list the family members that have health conditions.

Near the end, you will be asked to list the number of family members you have. Don’t include family members who are not related by blood, like step-brothers or step-sisters or relatives
Does Bobbie or has anyone in Bobbie’s family ever had any of these conditions?

Click all that apply. If none of these conditions apply, click Next.

- Allergies
- Asthma
- Eczema

- Not sure
Does Bobbie have or has anyone in Bobbie’s family ever had any of these conditions related to a behavior or learning problem?

Click all that apply. If none of these conditions apply, click Next.

- Learning disability or special education
- Attention deficit or hyperactivity
- Intellectual disability
- Developmental delay
- Autism
- Not sure

**Autism spectrum disorder (ASD)** is a group of developmental disorders. ASD affects social and communication skills. It is usually found in early childhood. ASD includes classic autism disorder, Asperger syndrome, and pervasive developmental disorder not otherwise specified (PDD-NOS).

**Ok**
Does Bobbie have or has anyone in Bobbie’s family ever had any of these conditions related to a behavior or learning problem?

Click all that apply. If none of these conditions apply, click Next.

- Learning disability or special education
- Attention deficit or hyperactivity
- Intellectual disability
- Developmental delay
- Autism spectrum disorder

Not sure
Does Bobbie or has anyone in Bobbie’s family ever had any of these conditions?

Click all that apply. If none of these conditions apply, click Next.

- [x] Born with a heart defect (e.g. hole in the heart)
- [ ] Born with a hip defect or dislocated hip
- [ ] Born with a kidney defect or disease
- [ ] Deafness or early onset hearing loss
- [ ] Not sure
Does Bobbie or has anyone in Bobbie’s family ever had any of these conditions?

Click all that apply. If none of these conditions apply, click Next.

<table>
<thead>
<tr>
<th>Condition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Seizures</td>
<td></td>
</tr>
<tr>
<td>Thyroid disease</td>
<td></td>
</tr>
<tr>
<td>Celiac disease</td>
<td></td>
</tr>
<tr>
<td>Inflammatory bowel disease or Crohn’s disease</td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td></td>
</tr>
<tr>
<td>Not sure</td>
<td></td>
</tr>
</tbody>
</table>
Does Bobbie have or has anyone in Bobbie’s family ever had any of these mental health conditions?

Click all that apply. If none of these conditions apply, click Next.

- ✔ Depression
- Bipolar disorder (manic depression)
- Schizophrenia
- Alcoholism or drug use
- Anxiety disorder
- Suicide
- Not sure
Does Bobbie or has anyone in Bobbie’s family ever had any of these conditions?

Click all that apply. If none of these conditions apply, click Next.

- [ ] Heart attack
- [ ] Coronary artery disease (Atherosclerosis)
- [ ] Stroke
- [x] High cholesterol
- [ ] High blood pressure
- [ ] Diabetes
- [ ] Not sure
Does Bobbie or has anyone in Bobbie’s family ever had any of these conditions?

Click all that apply. If none of these conditions apply, click Next.

- [ ] Sudden death or sudden infant death syndrome (SIDS)
- [ ] Bleeding disorder

- [ ] Not sure
Does Bobbie have or has anyone in Bobbie’s family ever had any of these genetic conditions?

Click all that apply. If none of these conditions apply, click Next.

- Cystic fibrosis
- Fragile X syndrome
- Abnormal or positive newborn screening result

- Not sure
Is there any other inherited condition or disease that runs in Bobbie's family?

- No
- Yes
- No
- Not sure
- Prefer not to answer
- Clear
Who has or had any of these conditions?

Including: Asthma, Autism spectrum disorder, Born with a heart defect (e.g. hole in the heart), Depression, High cholesterol, Learning disability or special

- Bobbie
  - Sister - 1
- Half-Sister
- Brother
- Half-Brother
- Mother
- Father

How many Sisters?
Which of these conditions does (did) Bobbie's Father have?

- Asthma
- Autism spectrum disorder
- **Born with a heart defect (e.g. hole in the heart)**
- Depression
- High cholesterol
- Learning disability or special education
Which of these conditions does (did) Bobbie's Mother have?

- Asthma
- Autism spectrum disorder
- Born with a heart defect (e.g. hole in the heart)
- Depression
- High cholesterol
- Learning disability or special education
Which of these conditions does (did) Bobbie’s Sister have?

- Asthma
- Autism spectrum disorder
- Born with a heart defect (e.g. hole in the heart)
- Depression
- High cholesterol
- Learning disability or special education
What type of Allergies did Samantha's Father have?

- Food Allergies
- Seasonal Allergies
- Other Allergies
What type of Bleeding disorder did Samantha's Half-Sister have?

- Anemia
- Blood clot or pulmonary embolism
- Hemophilia
- Sickle cell disease or trait
- Thalassemia
- Von Willebrand disease
- Thrombophilia
How old was Samantha when he/she was diagnosed with Heart Attack?

```plaintext
1 2 3
4 5 6
7 8 9
0 Clear
```
Is Bobbie’s Sister his or her twin/multiple?

- No
- Yes, an identical twin
- Yes, an identical multiple
- Yes, a non-identical (fraternal) twin
- Yes, a non-identical (fraternal)
Does Samantha have the same mom or the same dad with your Half-Sister?

- Same Mom
- Same Dad
Who in Bobbie’s mother’s family has any of these conditions?

Including: Asthma, Autism spectrum disorder, Born with a heart defect (e.g. hole in the heart), Depression, High cholesterol, Learning disability or special

- [x] Maternal Grandmother
- [x] Maternal Grandfather
- [ ] Maternal Aunt
- [ ] Maternal Uncle
- [ ] Maternal Cousin (Female)
- [ ] Maternal Cousin (Male)
Which of these conditions does (did) Bobbie's Grandfather on Bobbie's mother's side have?

- Asthma
- Autism spectrum disorder
- Born with a heart defect (e.g. hole in the heart)
- Depression
- High cholesterol
- Learning disability or special education
Which of these conditions does (did) Bobbie's Grandmother on Bobbie's mother's side have?

- Asthma
- Autism spectrum disorder
- Born with a heart defect (e.g. hole in the heart)
- Depression
- High cholesterol
- Learning disability or special education
Which cancers does your Uncle on your mother's side have or has he had?

- Brain Cancer
- BREAST Cancer
- Colon or Rectal Cancer
- Lymphoma
- Kidney or Bladder Cancer
- Leukemia
- Liver Cancer
- Lung Cancer
- Non-melanoma skin cancer
- Melanoma
- Other
- Pancreatic Cancer
- Prostate Cancer
- Sarcoma
- Stomach Cancer
- Thyroid Cancer
How old was your Uncle on your mother's side when he was diagnosed with Pancreatic Cancer?
Who in Bobbie’s father’s family has or had any of these conditions?

Including: Asthma, Autism spectrum disorder, Born with a heart defect (e.g. hole in the heart), Depression, High cholesterol, Learning disability or special

- [ ] Paternal Grandmother
- [ ] Paternal Grandfather
- [ ] Paternal Aunt
- [ ] Paternal Uncle
- [ ] Paternal Cousin (Female)
- [ ] Paternal Cousin (Male)
Your Family

How many sisters does (did) Bobbie have?

- 1 +

How many brothers does (did) Bobbie have?

- 0 +

How many daughters does (did) Bobbie have?

- 0 +

How many sons does (did) Bobbie have?

- 0 +
Your Family

How many sisters does (did) Bobbie's mother have?  
This means: how many aunts does Bobbie have on his/her mother's side?

How many brothers does (did) Bobbie's mother have?  
This means: how many uncles does Bobbie have on his/her mother's side?

How many sisters does (did) Bobbie's father have?  
This means: how many aunts does Bobbie have on his/her father's side?

How many brothers does (did) Bobbie's father have?  
This means: how many uncles does Bobbie have on his/her father's side?
Thank you for taking the time to answer these questions. Your answers are important and will help your medical team give you the best possible care.

Please type what is the most important thing you want to discuss with Bobbie’s provider today?
Thank You

Congratulations, you are finished. You may now return the tablet to the medical assistant or the reception desk.
Provider Interface
<table>
<thead>
<tr>
<th>Syndrome</th>
<th>Action</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congenital heart defect</td>
<td>Inquire about the specific heart defect(s). If left ventricular outflow obstruction defect (such as hypoplastic aortic arch). Patient has a family history of congenital heart defect.</td>
<td></td>
</tr>
<tr>
<td>Developmental delay or intellectual disability</td>
<td>Screen for developmental delay or intellectual disability.</td>
<td>Patient has a family history of developmental delay/intellectual disability.</td>
</tr>
<tr>
<td>Mood disorder</td>
<td>Screen patient for depression and bipolar disorder. Counsel the family about increased risk based on family history. Patient has a family history of depression/bipolar disorder.</td>
<td></td>
</tr>
<tr>
<td>Other mental health conditions</td>
<td>Evaluate and counsel family about increased risk of co-morbid mental health conditions (such as mood disorders). Patient has a family history of depression/bipolar disorder.</td>
<td></td>
</tr>
</tbody>
</table>