

## Optimizing Lipid Screening for T1DM Patients in Diabetes Clinic



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## Conflict of Interest Disclosure



- Conflict(s) of Interest
  - None
  - Amy Moffett, CPNP

A conflict of interest exists when an individual is in a position to profit directly or indirectly through application of authority, influence, or knowledge in relation to the affairs of PENS. A conflict of interest also exists if a relative benefits or when the organization is adversely affected in any way.



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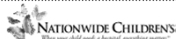
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## Objectives



- Understand rationale behind lipid screening for children and adolescents with Type 1 diabetes mellitus.
- Discuss how a quality improvement program can help lead to meeting departmental goals in relation to recommended screenings, thus improving patient outcomes
- Discuss how electronic health records (EHRs) can be used to facilitate ordering of recommended screenings by providers in a timely manner



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### Quality Improvement Project

Increase number of patients with Type 1 Diabetes Mellitus (age  $\geq$  10 years, T1DM for  $\geq$  1 year and/or established glycemic control) screened for dyslipidemia within the last 5 years from 74% to  $>90\%$  by 12/31/2016 and sustain until 12/31/2017.



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### Background



- Those with T1DM are high risk for dyslipidemia  $\rightarrow$  CVD
- Atherosclerotic disease begins in childhood
- CVD can begin within 10 years after diagnosis of diabetes
- ADA and ISPAD recommend baseline lipid screening in children 10 and older with T1DM for  $>1$  year (or sooner if glycemic control is established)



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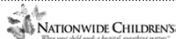
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### Challenges/Barriers



- Provider unawareness for screening
- Patient unawareness
- Failure of patients to go to the lab
- 74% of our eligible patient population with T1DM was receiving the appropriate recommended screening



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## Methods

- Diabetes team educated about initiative and made aware of guidelines for lipid screening in T1DM pts
- A key driver diagram (KDD) was formulated with the specific aim, key drivers, and interventions
- A “Best Practice Alert” (BPA) was built into the electronic medical system (EMR) to alert providers at the time of clinic visit for the need of placing an order for a lipid profile




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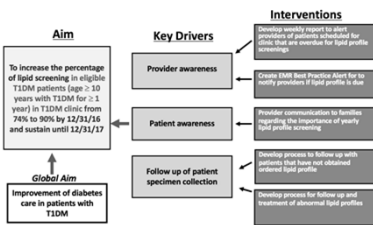
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## Lipid Screening in T1DM Patients




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## Lipid Best Practice Alert




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## Methods, continued

- Importance of screening was emphasized to patients/families
- Sent directly to lab following visit
- At process year end, list of patients with outstanding orders compiled and patients received reminder to have them drawn.
- If no order was in system, order placed and patients were mailed lab requisition and letter.
- Appropriate evaluation and follow up plan made based on results.




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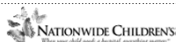
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## Results



- At baseline, 74% of our eligible population received recommended lipid screening. Implementation of a BPA along with measures to enhance provider awareness of the need for screening increased lipid screening to 91% of our eligible population of children and adolescents with T1DM.




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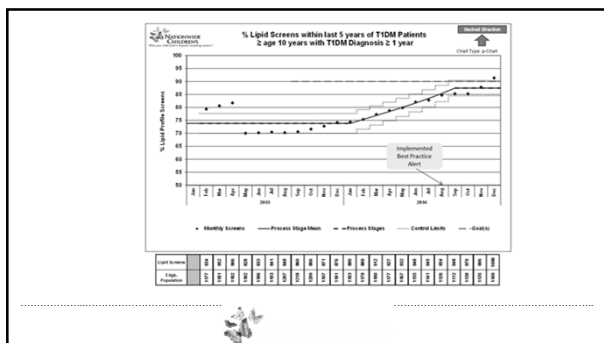
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### Discussion

- Future ideas to continue to maintain and improve the successful established work flow may include collecting labs in the endocrinology clinic instead of sending patients to the lab.
- Utilizing the laboratories new "S.A.F.E." program- Safe Area For Everyone and social stories to help prepare children for lab draw.

**Social Story**  
New Children Hospital East 2022

Today we are going to the Lab! There are no shoes! I will give a special.

I will look for someone who can help me with this thing trouble.

You did a great job! All done!

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### Acknowledgements

- We would like to thank the members of the diabetes team in the section of Endocrinology at our institution as well as our Endocrinology QI group for facilitating the success of this initiative

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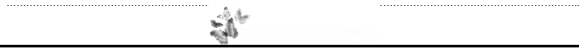
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