Interpreting Your Cholesterol Panel – A Patient-Centered Infographic

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“Interpreting Your Cholesterol Panel Results”
- A Patient-Centered Infographic

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August, 2023
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Problem Identification

• Patients often feel overwhelmed when they encounter a barrage of seemingly unintelligible and confusing laboratory values. With lab results now readily available online on patient portals, many patients view their results prior to receiving their primary care physician’s interpretation of their results.

• In addition, even when patients have the opportunity to discuss labs with their physician, it can be difficult to remember their discussion later on at home. As a result, patients experience a significant amount of anxiety while trying to make sense of their labs on their own.

• One particularly anxiety-inducing laboratory panel is the cholesterol panel. This project seeks to provide a simplified breakdown of a lipid panel and some recommendations for optimizing cholesterol levels.

AHEC Focus: Medical Practice Transformation (primary care, patient-centered care)
It is imperative that patients understand both their cholesterol panel results and the implications these values may have on their health. The sooner patients can implement lifestyle modifications and initiate cholesterol medications (if advised), the more likely patients will be able to decrease their risk of complications due to atherosclerotic cardiovascular disease.

Hypercholesterolemia and dyslipidemia have a significant cost impact on both an individual and global level. Overall, it is estimated that cardiovascular disease poses a significant economic burden, costing an estimation of over $863 billion and showing a rising trend.

A study by Dragomir et al. (2010) found that the cost of hospitalization due to cardiovascular disease were higher in patients who were not adherent to dyslipidemia treatment compared to patients who were more adherent ($71.0 million vs $65.9 million).
“Laboratory results are so complex. They have unfamiliar abbreviations, and I struggle to understand how to interpret them. Even when my doctor goes through them with me, I can’t remember the important points once I get home.”

- Anonymous patient with dyslipidemia at Newtown Primary Care

“I wish I could better support patients in interpreting their lab results. I can tell that they’re following along when we discuss their results in person, but they are worried they might forget our interpretation and what they need to do once they get home.”

- Anonymous medical assistant at Newtown Primary Care
Methodology & Intervention

**Methodology**

- A digital infographic was created with a breakdown/explanation of cholesterol panel values (total cholesterol, triglycerides, HDL, LDL) and high yield recommendations to improve cholesterol levels.
- This infographic was designed to be appealing to the eye and easy to understand; it is accessible with a 3rd grade reading level and utilizes colors, large headings and font, and pictures.

**Intervention**

- This infographic is accessible to any patient with a smart phone that can scan a QR code.
- Providers are encouraged to hold discussions with patients about their lab results as normal. Once their discussion is finished, patients will be encouraged to open up their phone camera, scan the printed QR code hanging in each exam room, and save this infographic for reference at home!
- This infographic can also be made available in printed form and distributed to patients who do not carry a smartphone.
Results/Response Data

- Given the abbreviated schedule of this rotation, it was not possible to develop, distribute, and analyze data regarding this project’s results in the 5 weeks allotted for our family medicine rotation.

- However, with an extension of time, we would distribute this infographic to all patients who receive orders for a lipid level or arrive to the clinic to discuss laboratory results for their cholesterol levels.
  - We would create and collect patient-completed surveys to assess for anxiety regarding lab result interpretation before and after use of this infographic.
  - We would also collect data on patient recommendations on how to improve the infographic or how to expand its resources.
Evaluation of Effectiveness & Limitations

• Given the timeframe of this project, we were not able to complete a full evaluation of this intervention’s effectiveness and limitations.

• However, upon extension of the project, we would collect data on how many patients opened this infographic and how many total views the infographic received.

• In addition, we would also survey patients in regards to their anxiety levels regarding laboratory result interpretation before and after use of this infographic.

• Limitations include limited access to this pamphlet for patients who do not have a smart phone or find difficulty utilizing the QR code. However, we anticipate having physical copies available for use.

• Another limitation is that this pamphlet is only available in English currently, and therefore would not be useful for patients who primarily speak another language. Our hope is to expand this initiative to create infographics in multiple different languages for better access in all communities.
Recommendations for Future Interventions

- Future initiatives should encompass other laboratory screenings, such as basic metabolic panels/complete metabolic panels, thyroid panels, complete blood count, etc.
- Of note, these infographics should never replace discussions between patients and their physicians regarding results; rather, they should simply aid in patient interpretation and understanding following a clinic visit.
- It is also recommended to make these infographics accessible in the patient portal, enabling patients to access these guides readily and quickly as they are accessing their lab values.
Resources


