

## Creating Healthy Work Environments 2019

### Implementation of a Clinical Practice Guideline for the Prevention and Management of Adult Obesity

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Obesity is a growing epidemic in the United States with over a third (36.5%) of Americans having an obese body mass index (BMI). Combining overweight and obese adults in the United States makes up over 70% of the population (Centers for Disease Control and Prevention, 2016). Kentucky, where the author practices, has the fifth highest rate of adult obesity in the United States (Segal, Rayburn & Martin, 2016). Obesity increases the risk of comorbidities such as hypertension, hyperlipidemia, type 2 diabetes mellitus, coronary heart disease (CHD), stroke, gallbladder disease, osteoarthritis, obstructive sleep apnea, respiratory problems, and some cancers. It's associated with an increase in all-cause mortality (Jensen, et al., 2014). This has consequences that transcend the individual's health including increased burden on providers and soaring healthcare costs. It's estimated that per capita medical spending is an additional \$1,429 per year higher in an obese person compared to one who is normal weight. With the prevalence of obesity projected to continue to grow, those costs could total \$48-66 billion dollars per year by 2030 (Hayes, Wolfe, Labbe, Peterson, & Murray, 2017).

Most studies have pointed out that despite obesity reaching epidemic proportions, screening and counseling for obesity is not common in primary care. Patients who have already been diagnosed with weight-related comorbid conditions receive counseling more frequently than those with obesity alone implying that many providers don't view obesity as a stand-alone health concern. Additionally, counseling by a provider regarding obesity can increase the prevalence of attempted weight loss (STOP Obesity Alliance Research Team, 2010). Treating overweight and obesity in primary care is complex and includes considerations such as medication, nutrition, physical activity, patient goals, surgical interventions, and motivational interviewing. There also exists implicit and explicit anti-fat bias and stereotypes that can be prevalent among providers and patients alike which can decrease likelihood for management of the problem. Lastly, implementation of clinical practice guidelines (CPGs) for primary care providers to assess and manage overweight and obesity is scarce (Hayes, Wolfe, Labbe, Peterson, & Murray, 2017).

There is evidence that implementing such guidelines can improve care and clinical outcomes (Chan, et al., 2017). Translating guidelines into practice for the management of patients' weight can result in improved knowledge and behavior of providers (Erickson, et al., 2014). It can also lead to effective management of overweight and obesity through identification of patients with overweight, obesity, and weight-related comorbidities. Once providers identify overweight and obese patients, they can incorporate evidence-based interventions (Wadden, et al., 2013; Barnes, Theeke, & Mallow, 2015).

The toolkit created by the Registered Nurses' Association of Ontario (RNAO, 2012) provides a step by step approach for advance practice nurses to incorporate CPGs into practice through systematic implementation utilizing the most recent evidence. This process utilizes the Knowledge-to-Action framework that has been adapted by the RNAO for implementation of CPGs. (Registered Nurses' Association of Ontario, 2012).

The problem of inconsistent management of overweight and obesity was identified. A literature search was conducted to identify clinical practice guidelines related to management of obesity in an adult population. The American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines concluded that the most successfully implemented CPGs are short and easy to understand, include patient handouts, are simple to use, require minimal resources, utilize computerized guidelines, are integrated into the electronic health record (EHR), and involve end-users (Chan et al., 2017). The Institute for Clinical Systems Improvement: Prevention and Management of Obesity for Adults

(6<sup>th</sup> ed) was selected after review by a team including the team lead, clinical practice manager, and two physicians who are also partners in the practice.

After receiving notification that the project met criteria for Not Human Subjects Research by the University of Cincinnati Institutional Review Board, a Gap Analysis was conducted to determine the differences between current practice and the recommended practice. This was conducted via chart audits stratified by BMI category and selected at random. While the providers are using appropriate strategies to manage obesity (BMI  $\geq 30$ ), most are not discussing weight with patients with an overweight BMI ( $\geq 25$ ) or with those who are normal weight. Assessment of patients' readiness to lose weight is important in providing an opportunity for motivational interviewing and for discussing realistic expectations but is done less than 30% of the time in obese patients and in less than 10% of overweight patients. Lastly, setting specific goals has been demonstrated to improve patient compliance and confidence with making changes to manage their weight. Currently, goals are being set with only 65% of obese patients and with less than 10% of overweight patients (Fitch, et al, 2013).

The team selecting the CPG chose this guideline for its ease of adaptability to the clinic. Evidence is weighted by strength of recommendation and the guideline allows for provider judgement and consideration. Stakeholders in this project were identified and include the physician partners who own and operate the practice, the Physician Assistants and Nurse Practitioner, managers, clinical staff and non-clinical staff, and the patients.

Resources required during the implementation of the CPG including time to meet with the implementation team, time and library resources for the literature review, staff meetings, time of staff involved in implementation, development of evaluation tools, integration of the CPG into the HER, and time for data collection. Stakeholders are supportive of the CPG for its impact on quality of care and potential for increased reimbursement for prevention and management of overweight and obesity.

Barriers to CPG implementation include time and human resources in addition to skepticism, lack of knowledge, and age of providers with older clinicians being less likely to utilize the recommendations. Additionally lack of time or having other priorities during the visit, lack of reimbursement for the time spent counseling, and lack of awareness of resources outside of primary care can prevent the CPG from being utilized (Coleman, et al., 2012).

Many factors contribute to the success of this type of intervention. Involvement of stakeholders, formal leadership for the implementation, support from management, and a history of quality improvement can facilitate implementation (Chan, et al., 2017). Another facilitator to success in this setting is the medical weight loss practice affiliated with the internal medications practice that is owned by the same partners. Providers are likely more inclined to refer interested patients to this structured, medically supervised weight loss program practice than a practice without such affiliation.

Use of the recommended CPG interventions in this setting will focus on implementation during each patient's annual wellness exam as well as regular follow-up visits for chronic disease management. First, an educational presentation was shared at a meeting attended by all providers, managers, and staff. The CPG was discussed along with supporting data and specific ways in which the practice could implement the evidence-based interventions. The team leader will equip each provider with a laminated copy of the algorithm for reference and examples of specific goals were listed on the back per the request of the providers. To encourage symbolic knowledge use, the importance of evidence-based obesity prevention and management was discussed along with pre-implementation data abstracted from patient charts to illustrate the need for a change. All questions were addressed, and providers were encouraged to reach out to the team leader during the implementation with any questions or concerns.

The CPG has been integrated into the HER to help prompt the providers to address weight with every patient. A readiness for change has been incorporated into the check-in form for all regular follow-up visits and annual wellness visits. Chart audits are scheduled to evaluate whether the CPG is being

implemented appropriately. Providers or staff members who are not meeting established CPG criteria will be contacted to assess barriers and gain feedback so that new methods can be explored.

Knowledge use is complex and therefore should be monitored using multiple methods (RNOA, 2012). To monitor behavioral knowledge, charts will be audited using stratified random sampling to evaluate how well the CPG is being implemented. This data will be collected at regular intervals to address any issues and again at completion of the project to compare to pre-implementation data.

To assess conceptual knowledge, all providers will be contacted via survey for feedback regarding CPG implementation to assess barriers, facilitators, attitudes, and intentions so that adjustments or additional training can be completed if indicated.

Implementation is an ongoing process as the final goal is sustained knowledge use. Sustainability of practice change ensures that the CPG becomes part of current and future practice. By implementing the selected CPG in this internal medicine setting, the aim is to equip the providers and staff with the tools they need to provide care to patients that is congruent to the most recent and highest quality data available. Obesity is an epidemic, and patients' annual wellness visits and regular follow-up visits are great opportunities for providers and staff to address patients at risk for this disease, assess their readiness for change, and initiate evidence-based interventions.

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**Title:**

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**Keywords:**

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### **Abstract Summary:**

Over two-thirds of Americans are overweight or obese impacting not only the individual's health, but putting additional strain on healthcare providers and increasing healthcare costs. By implementing a clinical practice guideline for the prevention and management of obesity in a primary care practice, clinical outcomes and quality improvement can result.

### **Content Outline:**

1. Introduction
  2. Obesity is a growing epidemic in the United States with over a third (36.5%) of Americans having an obese body mass index (BMI). Combining overweight and obese adults in the United States makes up over 70% of the population. Kentucky, where the primary care clinic is located, has the fifth highest rate of adult obesity in the United States.
  3. Most studies have pointed out that despite obesity reaching epidemic proportions, screening and counseling for obesity is not common in primary care.
  4. There is evidence that implementing such guidelines can improve care and clinical outcomes
1. Body
    1. The Institute for Clinical Systems Improvement: Prevention and Management of Obesity for Adults (6<sup>th</sup> ed) was selected as the clinical practice guideline to implement in the practice
      1. Includes an algorithm for providers
      2. Easily integrated in the electronic health record

- Requires minimal resources for implementation
- 1. The practice is doing a better job than the literature reflects on providing evidence-based care to obese patients
  - 1. Over 90% of obese patients had an appropriate weight management strategy documented in the last year
- 2. There is room for improvement
  - 1. Less than 20% of overweight patients had their weight addressed by their provider in the last year
  - 2. Less than 20% of overweight and obese patients were assessed for readiness to lose weight
- Less than 70% of obese and less than 10% of overweight patients set a goal related to weight management with their provider
- 1. Implementation of a clinical practice guideline seeks to improve comprehension and use of research supported interventions for prevention and management of a obesity as a disease process

## Conclusion

By implementing the clinical practice guideline, the author seeks to enhance quality of care and clinical outcomes by improving provider adherence to the evidence-based recommendations for weight management.

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**Author Summary:** Chelsea Rust has worked as a Nurse Practitioner in the field of medical bariatrics for 3 years where she specializes in the treatment of obesity and its co-morbid conditions. She is expected to complete her DNP at the University of Cincinnati this spring.