Implementing American College of Cardiology Recommendations to Improve Cardiovascular Health Using a Client-Centered Approach
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Supported by Frontier Nursing University, Versailles, KY

Aim
Increase CV screening and improve healthy lifestyle behaviors using a shared decision-making, client-centered approach for adults to 80% over 90 days.

Methodology
Planned Improvement
• The plan-do-study-act (PDSA) model, a rapid cycle improvement process, was planned, implemented, & disseminated within 90 days.
• Clinical practice recommendations guided the development of four core interventions:

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<th>Core Interventions</th>
<th>Process</th>
<th>Outcome</th>
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<td>AIM</td>
<td>Mean lifestyle improvement score</td>
<td>Achieved baseline of 21% to 80% over 90 days</td>
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<tr>
<td>Screening tool: ASCVD risk calculator</td>
<td># of clients completing ASCVD risk assessment # of clients seen</td>
<td>Percentage of clients identified with ASCVD risk score &gt; 7.5</td>
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<tr>
<td>Client engagement: Option grid/SDM approach</td>
<td># of clients completing option grid of clients seen</td>
<td>Mean completed goals score</td>
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<td>Best practice care: Case management log</td>
<td># of clients in height of clients choosing options</td>
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<td>Team engagement: Modified Stress Overload Scale (SSO)</td>
<td># of completed team engagement surveys # of surveys sent</td>
<td>Mean team stress level score: Range 1-6</td>
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<td>Balancing measure</td>
<td>Mean project hours spent per week</td>
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Note: SSO was a survey tool that assessed client stress.

Results
The project AIM/m ean lifestyle improvement score was a composite score derived from the mean risk screening & best practice care scores. Although technically there are too few data points to analyze for shifts & trends, you notice gradual upward progress. The project AIM score increased from a baseline of 21% to 88% surpassed the projected goal of 80%. MI = motivational interviewing; SDM = shared decision-making; CGPs = clinical practice guidelines.

Conclusions
• The ACC guidelines offer sound evidence for incorporating the ASCVD risk assessment tool to inform intensity of lifestyle intervention.
• The client-centered, SDM approach empowered clients to take an active role in mitigating modifiable risk factors to improve CV well-being & HRQOL.
• The project AIM/m ean lifestyle improvement score combined risk screening & best practice care, which increased from a baseline of 21% to 88% surpassed the projected goal of 80%.
• The validated screening tool showed a positive association with motivating clients to establish healthy lifestyle routines, but sustainability depends on individual commitment.
• The ASCVD risk screening tool is user friendly & time efficient; while SDM approaches are a mainstay of standardized care, therefore generalizable to primary care practices.
• Limitations to generalisability include the virtual setting, convenient sampling bias, & low power.
• Further QI studies could focus on a team approach to support clients in achieving long-term goals.
• The next step for DNP Leaders involves establishing collaborative interdisciplinary teams to bridge the gap between best practice research & clinical practice to improve quality CV health outcomes.

Lessons Learned
• The virtual setting created barriers to an interdisciplinary team effort toward a common goal but also provided access to prevent screening during the COVID-19 pandemic.
• Subjectivity bias in analyzing health indicators emphasized the value of writing clear operational definitions for metrics.
• Learning involved the value of client partnerships using SDM approaches to promote client-centered care as the primary driver of change.
• In reflection, despite some ambivalence to change, guidance helped improve client’s self-efficacy & addressed personal barriers in achieving goals.

References
1. National Problem 1,4,5
• Heart disease is the leading cause of death in the United States
• A person dies every 27 seconds from heart disease
• Almost 647,000 Americans or 1 in every 4 deaths
• Overall prevalence of cardiovascular disease (CVD) is 48%
• Leads to poor health outcomes posing a population health risk for heart attack & stroke.
• Direct CV healthcare costs total > $200 billion annually

2. Problems/Goals in Care
• An audit survey showed that only 11% of participants discussed their 10-year atherosclerosis CVD (ASCVD) risk score with their provider.
• Only 23% of participants followed best practice recommendations.
• Although 65% of participants reported shared decision-making (SDM) conversations with their provider, this indicated a need for improvement.
• A baseline team survey showed high stress levels at 60% with external life events & & work-related quality of life (HRQOL) plus/#!/calculate/estimate/


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Acknowledgements

AIM/Mean lifestyle improvement score

Core Interventions/Outcome measures

Best Practice Care & Completed Goals

Team engagement plan: Stress Overload State survey
do-100-33 Morgantown, WV 26505 (304) 285-3311; Fax: (304) 285-3563 http://www.hhrb.org

Best practice care: Case management log

Case management log:

Client engagement: Option grid/SDM approach

Team engagement plan: Stress Overload State survey (SSO)

Screening: ACC ASCVD risk calculator

Best practice care: Case management log

Case management log:

Client engagement: Option grid/SDM approach

Screening: ACC ASCVD risk calculator

Planned improvement

During the four, two-week PDSA cycles, observations were gathered weekly, plotted on run charts for synthesis & reflection to inform the next cycle tests of change (TDC) to drive improvement & sustainability of healthy lifestyle behaviors.

Background

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Learning involved the value of client partnerships using SDM approaches to promote client-centered care as the primary driver of change.

In reflection, despite some ambivalence to change, guidance helped improve client’s self-efficacy & addressed personal barriers in achieving goals.

The best practice care score correlated with the completed goals score that showed six consecutive shifts & trends indicative of special cause variations that coincided with individualized coaching. Clients had difficulty writing measurable SMART goals so the most impactful TDC was assistance in writing goals that provided the foundation for clear measurable outcomes. Note: Medians were 81 & 78 respectively. MI = motivational interviewing.

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