RESEARCH CONSORTIUM
for Health Care Value Assessment

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Finding Meaning in Analytics:
The Low-Value Care Visualizer

Decision-making that is rooted in analytics and information is good practice generally, and essential when you're making healthcare decisions. One great opportunity to leverage analytics is to better understand and manage how much low-value care is occurring within a system. Low-value care is the administration of healthcare services or technologies that offer little to no clinical benefit to patients and is often a major driver of system inefficiencies, medical errors, and wasteful spending. Recent research suggests that the annual cost of wasteful health care spending in the United States is $760-$935 billion dollars.[1] With the increasing shift towards a value-driven health care system, many states across the U.S. are looking for tools to reduce low-value care, to reign in wasteful spending, and to ensure patients receive high-quality, high-value care.

However, it can be difficult to make sense of the dense claims data on spending and utilization for low value care services. Often, the decision makers that most need to understand this information lack staff who can create easy-to-understand visualizations of their dense analytics. To help, the Research Consortium for Health Care Value Assessment's **Low-Value Care Visualizer** offers an open-source, web-based resource that helps users transition from dense, unhelpful numbers to meaningful, usable and understandable visualizations.

ABOUT THE VISUALIZER

The Low-Value Care Visualizer is a resource offered by the Research Consortium for Health Care Value Assessment and intended for state health care directors, state health care alliances, health systems, provider groups, and anyone else with access to claims-based analyses of low-value care. Users have two options for producing visualizations. The first is through downloading a Microsoft Excel™ data template, saving the low-value care analytics, and uploading it to the website. Secondly, users can manually enter analytics within the web form (provided they enter information for all of the required data fields). A complete user guide can be found here.

Visualizations include:

- the percentage of total members that received low-value care;
- percentage of the total budget attributed to low-value care; and
- deeper dives into specific low-value care services (including trends, if the user has information representing multiple years).

1. Shrank, W., Rogstad, T., & Parekh, N. (2019), *"Waste in the US healthcare system: Estimated costs and potential savings."* Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/31589283

Demonstration of Low-Value Care Visualizer

To save on costs and increase efficiency in state budgets, the Virginia Center for Health Innovation has specific goals to reduce low-value care for the residents in the state of Virginia.[2] To that end, they put the Virginia All Payers Claim Database through the Milliman Health Waste Calculator[3] and were able to generate information and reports about the level of low-value care occurring in their state in order to identify opportunities for budget savings. Here is where the Low-Value Care Visualizer is a helpful tool to take the dense data provided in these reports and utilize that data so a state can create clear visualizations that can help track wasteful spending and guide future policy decision-making.

Using the *Low Value Care Visualizer*, the Virginia Center for Health Innovation is able to quickly see that their dataset represents over 3.8 million members, of which 41% (over 1.5 million) received one or more services of little to no value. Over $1.8 billion was spent on these health care services and 38% (over $706 million) is attributed to low-value care (see Figure 1). They could see the Top 5 Costliest services (see Figure 2):

- CBC — Don't obtain baseline laboratory studies in patients without significant systemic disease (ASA I or II) undergoing low-risk surgery - specifically complete blood count, basic or comprehensive metabolic pael, coagulation studies when blood loss (or fluid shifts) is/are expected to be minimal;

- Imaging Eye Disease — Don't routinely order imaging tests for patients without symptoms or signs of significant eye disease);

- PICC — Don't place peripherally inserted central catheters (PICC) in stage III-V CKD patients without consulting nephrology;

- EKGs — Don't order annual electrocardiograms (EKGs) or any other cardiac screening for low-risk patients without symptoms; and

- CT Dizziness — Don't perform routine head CT scans for emergency room visits for severe dizziness.

They could also drill into each of the individual services and identify important information on what is contributing most to the wasteful spending and the potential harm to patients. This data indicates that 83% of the dollars spent on obtaining baseline laboratory studies in patients without significant systematic disease undergoing low-risk surgery[4] is wasteful; impacting 82% of members; and contributing 11% to the overall total spend (see Figure 3). Additionally, if a state had more than one year of data the Low-Value Care Visualizer could provide trends that reflect the impact to members and dollars. The Virginia Center for Health Innovation has spent years studying their low-value care services and redefining which services are most important to them to address. For more information on their journey see www.vahealthinnovation.org.

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2. https://www.vahealthinnovation.org/scv/

3. https://www.medinsight.milliman.com/

4. Full Recommendation: Don't obtain baseline laboratory studies in patients without significate systemic disease (ASA I or II) undergoing low-risk surgery - specifically complete blood count, basic or comprehensive metabolic panel, coagulation studies when blood loss (or fluid shifts) is/are expected to be minimal.

GUIDING POLICY DECISIONS

Using the visualizations in the Low-Value Care Visualizer can help guide discussions and decisions for administrators, policymakers and other key stakeholders of health care services. The results can provide some focus as to where to follow up on what is occurring and why. For example, the top 5 costliest services may suggest that there are loopholes in medical policies, or that there needs to be more provider and patient education on when to deliver these services. There may need to be process improvement strategies focused on these areas, or there may need to be legislation to help curb the prevalence of non-value-added care. Regardless, the Low-Value Care Visualizer can help states and other key stakeholders by creating meaningful visualizations of their process data, identifying potential areas of focus for intervention and tracking progress over time.

CONCLUSION

The level of low-value, wasteful care that is occurring within the health care system will continue to be a focus of attention for forward-thinking health care administrators and professionals as well as policymakers and administrators. Visualizing low-value care analytics is critically important for presenting findings to these important stakeholders and decision-making. We encourage you to try the tool and let us know what you think. Tell us what you'd like to see changed or added and tell us what would help you the most in conveying the underlying message of your data.

ADDITIONAL INFORMATION

The Tool's development was a two-phase undertaking.[5] To identify the most meaningful types of information for stakeholders and the most understandable ways to display that information, we first conducted qualitative interviews with insurers, providers, employee groups, and large health systems. Based on these interviews we developed a plan to build a web-based, freely available reporting tool to display clear visualizations of low-value care analytics.

The Low-Value Care Reporting Tool standardizes the visualization of low-value care analytics. This tool is not a calculator or analytic estimator. Instead, it visually displays the outputs of any low-value care analytic report, such as those created by an in-house claims management team, or by a more formal vendor such as PROMETHEUS Analytics, MedInsight Waste Calculator, Rowd Map, and others. The Low-Value Care Reporting Tool does not require or accept any sensitive or protected information or save any information after the user terminates the session.

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5. Funding for this project was provided by PhRMA.

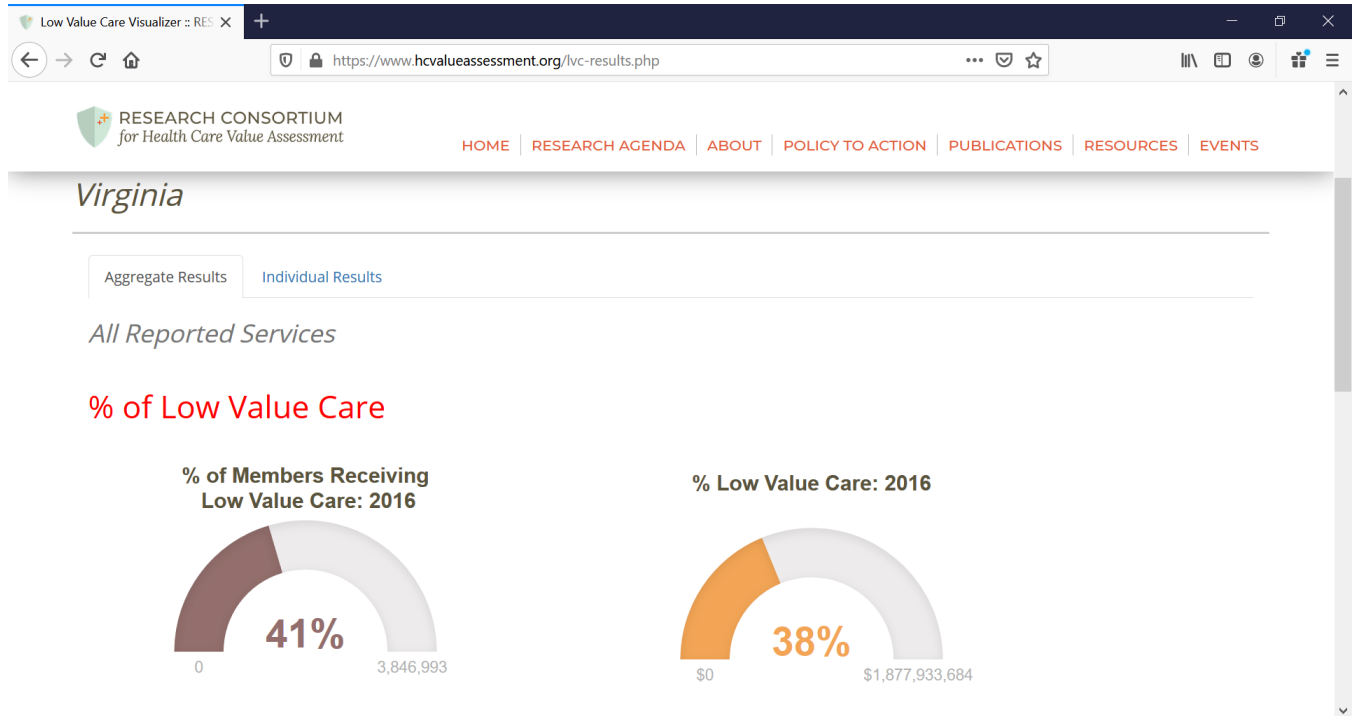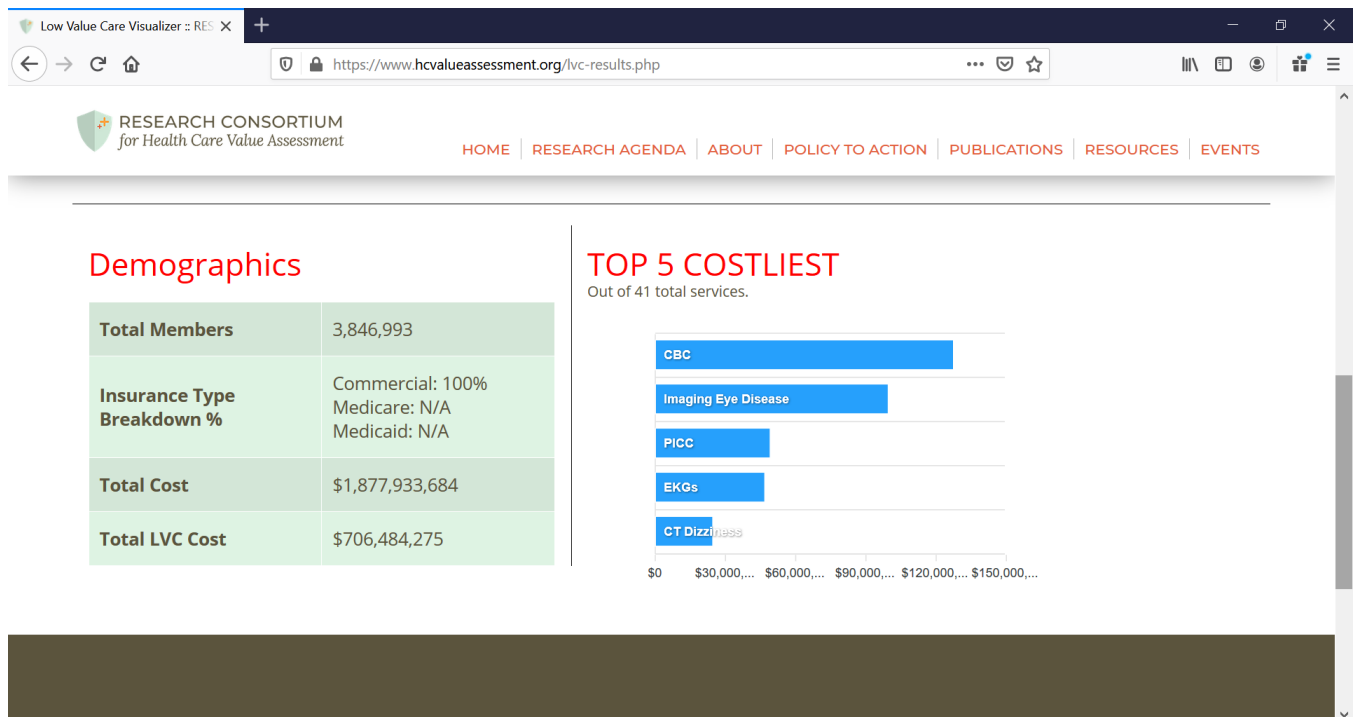# Appendix

FIGURE 1. VISUALIZATION OF ALL REPORTED SERVICES

FIGURE 2. COSTLIEST SERVICES

FIGURE 3. INDIVIDUAL SERVICE RESULTS