“Diagnostic testing is not just about the laboratory or the testing instruments—it is a central clinical process that impacts the entire medical institution.”

Brian Jackson, MD, MS
VP, CMIO, ARUP Laboratories
Associate Professor of Pathology,
University of Utah
Providing Comprehensive Utilization Management

Positioning our clients to succeed and lead the way in transitioning to a value-based healthcare model shapes the full-spectrum of the UM+ strategies and tools we’ve developed.

Relying on our time-honored expertise, we’re empowering our clients with the most current testing knowledge, highly customized analysis, and unparalleled guidance in implementing these tools to attain results.

UM+ results will allow you to hone in on and manage testing costs while ensuring excellent patient care. The results—evidence-based guidance specific to your laboratory—will provide insight and oversight, pointing out testing patterns and opportunities for improvement.
Help you identify over-, under-, and misuse of individual laboratory tests.

Estimate the clinical and economic impact of suboptimal test ordering.

Improve your patient care with shorter times to diagnosis and avoidance of inappropriate tests.

Develop and implement a test formulary that will drive down unnecessary testing and be supported by providers.

Engage your physicians and administrators in clinically appropriate testing.

Establish the most appropriate and effective governance for a lab UM program.

Minimize downstream healthcare costs.

ARUP’s recommendations are based on national guidelines, published clinical studies, industry best practices, and the expertise of more than 85 ARUP pathologists and University of Utah School of Medicine faculty.
The Proof Is in the **Results**

After a two-year inpatient analysis for a large academic medical center, ARUP’s Consultative Services conservatively identified that 4,098 tests out of a total of 15,002 performed in five test subgroups were unnecessary (27%). This is consistent with the Institute of Medicine’s findings that approximately one third of healthcare expenditures are not needed.

If this client, who performs 4.5 million inpatient tests annually, reduced all test orders by 27%, it would result in 1.2 million fewer tests. If the average incremental test cost is $10, the cost savings to the hospital for laboratory testing would equal $12 million.

<table>
<thead>
<tr>
<th># of total tests</th>
<th>15,002</th>
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<tbody>
<tr>
<td># of unnecessary tests</td>
<td>4,098</td>
</tr>
<tr>
<td>% unnecessary</td>
<td>27%</td>
</tr>
<tr>
<td>potential cost savings</td>
<td>$12 MM</td>
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Our Knowledge Is Your Knowledge

An industry knowledge leader for more than 30 years, ARUP continues to blaze the trail in advancing diagnostic testing, continually accompanied by educational and hands-on resources that help set our clients up for success.

UM+ is the most advanced and inventive version of these resources thus far, aligned to empower our clients to thrive in a shifting and dynamic industry.

We provide replicable, proven models for immediate implementation—models applicable to various areas in pursuing value-based care. As partners, we provide you with the people and systems needed to spearhead UM+ now.

As an academic-medical institution, ARUP Laboratories' responsibility has always been to share evidence-based knowledge, consistently looping it back to improving patient care.

Being on the forefront of laboratory medicine and always looking forward positions ARUP to pilot resources that provide pivotal data and strategies so our clients can remain vital and proactive in a changing healthcare environment.
Adopting a Cost-Savings Frame of Mind

At first, ARUP’S Send-Out Analysis Report (formerly ATOP®) simply increased Memorial Hospital’s (Belleville, IL) awareness about the potential for cost-savings in send-out tests. As each effort returned results, Memorial Hospital became increasingly more proactive in using ARUP’s utilization management tools and expertise to educate and win over medical staff in testing shifts and to hone in on specific areas of testing. Evan Evans, MT(ASCP), core lab supervisor, was instrumental in tracking the numbers and spearheading the hospital’s efforts.

1 benchmark comparisons

We learned that 12% of mycoplasm pneumonia testing that ARUP was doing came from us. It was our highest volume send-out test to them. The Send-Out Analysis report makes us start looking at things like this in comparison with other hospitals. It put us in a cost-savings frame of mind and showed us the areas to focus on to make it happen.

2 new test codes

For celiac testing we had always ordered the GIA, TTGA, TTGG, gliadin G, and gliadin A for every order. ARUP has a celiac reflex panel that only performs the test needed based on the IgA result. It was passed by critical care, and we eliminated our old panel and created the new test code. We have received no complaints from physicians and have reduced our monthly expenses for this test by $1,400 (a $16,000 yearly savings).

3 pathologist approval

We started looking at our high-volume, high-cost tests (any test over $200) to see if we could look at appropriateness. We found we were sending flow cytometry out on almost all pleural fluids ordered regardless of diagnosis, and that they were mostly negative, so we put a process in place that all orders for body fluid flow cytometry had to be approved by a pathologist. This saved $2,300 a month ($27,000 annual). Between this process and re-negotiating our contract with ARUP, we are looking at a $140,000 savings this year.
Doctor Sparks Change with UM Action

For years, laboratorians have either seen or suspected inappropriate test orders. As a pathologist, I saw many examples and began examining ways to improve utilization; however, I didn’t want to become a gatekeeper telling other doctors what should be ordered. Not sure where to begin, I turned to ARUP’s initial Send-Out Analysis Report to generate discussion with our medical staff and administration.

Using the report, I showed our medical staff examples of problematic test-ordering patterns. The concise data caught their attention and they were surprised at what they were seeing. Providing data to the medical staff fueled interest in lab utilization.

A short time later, I created our laboratory utilization committee with the support of ARUP’s medical executive committee. Our first step was taking data from the report to create a laboratory formulary using a three-tiered system (i.e., common tests orderable by any provider, tests orderable only under specific circumstances or by certain specialties, and unusual tests requiring special approval).

Interestingly, when doctors saw misuse in testing related to their individual specialties, they started taking ownership, and participation and support continued to grow.

Winning Over the Doctors

The data in the Sendout Analysis Report, in conjunction with the information provided by the utilization committee, allowed me to act more as a director spearheading the utilization effort rather than a gatekeeper. I was able to get medical specialty expertise needed to help vet possibly inappropriate tests.

In addition to the tiered lab formulary, we also began comprehensive consolidation to ensure that all our tests were sent to one reference laboratory. This step was also prompted by data in the report, as we realized we occasionally missed out on cost savings by sending tests to other, higher-cost labs.

Within the first year, our tiered lab formulary and consolidation strategies saw a cost savings of approximately $900,000 as compared to the previous year.

Since that time, several other reference lab vendors have approached us with competitive pricing; however, we have continued our relationship with ARUP because we realize it’s not just about unit pricing. In the long run, the added utilization support, analytical data and expertise, and person-to-person support exponentially save more money.

Tip of the Iceberg in Cost Savings

We continue to use the feedback in the Send-Out Analysis Report as a guide, using each one to analyze how we’ve improved. Based on the previous five years of reports, we’re now reconfiguring our electronic order-entry system, incorporating utilization recommendations, adding...
clarity to similar test methodologies, and building customized test-order menus in our facilities.

This is just the tip of the iceberg; we are starting to realize massive downstream savings from improved test utilization. Fixing lab utilization alone will not solve all problems in the healthcare industry today, but many problems in healthcare cannot be addressed until appropriate lab utilization is achieved, as lab testing influences 70–80 percent of subsequent downstream medical decisions.

If inappropriate tests are ordered, they can lead to unnecessary procedures, drug therapies, imaging studies, or other intervention. As an example, improvements in seemingly unrelated problems, such as chest pain length-of-stay, have been directly attributable to focused lab utilization efforts in our facilities.

These downstream effects can probably be measured in the millions of dollars. Saving money on lab tests is beneficial, but the real impact is seen in the efficient improved downstream medical care leading to superior quality patient care.

Focusing on test-utilization management is a win-win for everyone: our patients, our medical staff, our hospitals, our laboratories, and our profession. There is no downside.

Andrew Fletcher MD, CPE, FCAP
Pathologist, Mountain States Health Alliance
Corporate Physician Advisor

“This is just the tip of the iceberg; we are starting to realize massive downstream savings from improved test utilization … Lab testing influences 70–80 percent of subsequent downstream medical decisions.”
Why UM+?

Trust in Our Proven Track Record
For us, utilization management is not a buzzword; it is traction for cost-saving results. For decades, our team has provided clients with the knowledge and tools to reach their goals, and then some.

Avoid Roadblocks
Working with UM+, our clients leverage what we offer to avoid unnecessary expenses and win over support for cost-saving changes more quickly and efficiently.

Implement a Sustainable, Comprehensive Program
Our consultative and UM+ services include an effective network of offerings that meet our clients’ needs as they change and, over the long term, achieve scalable outcomes.

For more information about ARUP’s UM+ program, please contact your account executive or email consultativeservices@aruplab.com.
“We have arrived at the intersection where what our clients need is *precisely* what we are the most well-equipped to offer.”

Casey Leavitt, MBA
Director of Consultative Services
ARUP Laboratories