

I. Critical Role of Early Detection

The value of early detection has been well documented. Appropriate early detection and treatment can serve to reduce the severity and improve the medical outcomes of respiratory and other infections, asthma, depression, diabetes, heart disease, cancers (skin, breast, colon, etc.) and most other diseases and conditions.

Correspondingly, most problems detected and treated earlier are less expensive to treat than those caught and treated later. This cost savings stems from multiple impacts including, but not limited to: decreased problem severity, fewer complications, faster recovery times and reduced absenteeism.

II. Conventional Minimum Components

At a minimum, personal early detection efforts should consist of risk-based exams and tests every 1-5 years, regular self-exams and appropriate follow-up in the event early warning signs are detected.

The USPSTF Guidelines establishes minimum early detection screening guidelines for individuals every 1-5 years based on age, gender and other risk factors.

While these guidelines are well-researched and periodically updated, the basis of these guidelines is cost-effectiveness relative to impact on health care costs (of concern to health plans and the insurance sector), but with no consideration of productivity, absenteeism and other impacts which are also of concern to employers.

III. Conventional Strategies

Conventional strategies adopted by health plans and employers to improve early detection include providing benefit coverage provisions for early detection (wellness) screenings and executive physicals.

Other strategies include offering worksite-based health screenings, health risk assessments and targeted communications (e.g., women's health and recommended screenings). However, these strategies vary widely in quality, cost and effectiveness.

IV. Shortcomings of Early Detection Strategies

While the value early detection and its minimum components are well documented, so are the problems that are common to many early detection strategies, such as:

- Low compliance rates — e.g., $\geq 60\%$ of the average work force does not obtain the recommended exams and tests and/or perform the recommended self-exams (with key barriers including inconvenience, costs, forgetfulness, fear, lack of awareness and low confidence)
- Unnecessary testing — e.g., redundant testing, unwarranted tests, overtesting, risky tests
- Testing error — e.g. false positives, false negatives, poor quality control, poor quality providers, malpractice
- Gaps in follow-up for those identified as severe and borderline at-risk
- Missed opportunities — e.g., undetected risks and conditions; disability, absenteeism and cost management opportunities
- Cost problems — e.g., inefficiencies, duplication of costs, unnecessary cost layers, unnecessary testing, avoidable cost spikes, higher mark-ups, overcharging

Many of these shortcomings stem from a fragmented approach to early detection without a strategic plan based on best practices. This fragmentation and lack of consistency is often even more evident in environments where multiple health benefit plans exist — each with potentially different priorities and coverages regarding early detection.

V. Design Goals for Maximizing Value & Success

The most effective early detection strategies result from a “best practices” focus, incorporating:

- High standards — e.g., covered tests, quality, minimized risks to individuals, confidentiality, etc.
- Maximized efficiencies and convenience — e.g., process, logistics, accessibility, times...for each component
- Appropriate sequencing — e.g., worksite screenings, other screening options, training, communications
- Appropriate decision support components for early detection, follow-up and related medical decisions — e.g., training, home resources, online and other resources
- Effective promotion and communications components
- Effective reporting to individuals with links to follow-up goals and reinforcement of existing support resources
- Functional management reporting
- And for employers, consideration of absenteeism, disability, productivity and other management goals



VI. Model Strategy

A best practices model to maximize the success of an early detection strategy includes the following components:

- A. Benefit coverage for early detection screenings of \$200-\$400 per person per year — to cover B and appropriate other screenings/exams (B, F) and immunizations obtained via worksite screenings or physician
- B. Provide core (selected) screening components and health risk assessments at the worksite — to improve participation rates and capitalize on efficiencies and corresponding lower costs from large group screenings (vs. doctor office-based screenings).
- C. Provide effective core competency training in medical self-care — to reduce the risk of unnecessary spikes in utilization related to early detection self-exam strategies AND to improve early detection between screenings.
- D. Provide online medical decision support — to assist individuals with early detection and follow-up related decisions regarding symptoms, care-seeking, tests/testing options, treatment options, doctor-patient communications, patient safety, etc.
- E. Provide effective core competency training in early detection — to improve participation in and/or follow-up to early detection screenings AND to improve early detection efforts (e.g., self-exams) between screening.
- F. Consider offering appropriate supplemental testing options at the worksite (e.g., with B), subject to A.
- G. Effectively promote B, C, D, E and F when offered — to maximize appropriate participation, compliance and utilization of related follow-up.
- H. Regularly communicate and reinforce A, B, C (e.g., self-care books), D, E (self-exams) and other related resources via benefit communications, newsletters, online and other methods — to maximize participation, compliance and utilization of related follow-up.
- I. Utilize aggregate group report data (from B): 1) To improve the effectiveness of D, E, F, G, H and targeted risk/disease management support components for those at-risk and/or with identified conditions; and 2) As an evaluation metric component to measure impacts and outcomes of screenings, risk assessments and other strategies to achieve related goals.
- J. If necessary, consider additional policies and/or incentives to improve participation rates in B.

For best results,
implement:

C before E

E before or after B

E before F

B, C, E and F
during work hours

VII. Results of a Model Strategy

Organizations implementing model strategy components (VI: A-J) realize improvements in:

- Screening participation (compliance) rates;
- Problems identified (for risk, disease and care mgmt);
- Follow-up with critical at-risk;
- Cost-of-goods savings via worksite delivery (and related efficiencies and economies of scale) of selected screening components and health risk assessments;
- Overall health cost savings and lower rates of cost increases (than national norms);
- Data quality, continuity and availability for strategy improvement and linkages to existing support resources/programs for special risks and diseases; and
- Reliable clinical metrics for risk reduction-related incentive programs (vs self-reported HRA results which may be not be accurate if tied to significant financial rewards for answers to HRA questions).

VIII. Other Considerations

Avoiding Unnecessary Costs - Early detection strategies can be vulnerable to unnecessary costs, such as:

- 1) Unnecessary testing;
- 2) Vendor differences in price;
- 3) Spikes in health costs if early detection training is done before self-care training (self-care should be done first);
- 4) Inappropriate incentives — e.g., unnecessary, premature, excessive (see next page);
- 5) Executive physicals that involve unnecessary testing and/or inflated prices.

Most of these costs are avoided by implementing a model strategy (previous column). Diligence to vendor selection should strive to assure quality services (e.g. promotion, tests, reports, customer support) and appropriate pricing.

Large Employers - Implementing worksite screenings with large populations can result in large up-front costs.

If a concern, this large cost can be spread-out by gradually implementing (staggering) the strategy across worksites over time. For example, a large employer with a total of 6,000 employees across 6 worksites could offer the screenings at 2 sites each year, so that only 2,000 employees per year are targeted. The trade-off would be the potential consequences of delayed early detection potentially serious problems (within the sites/populations experiencing 1-2 year delays in receiving such screenings), the consequences of which would be even greater with an employer with a very low turnover rate.



Funding and Cost Coverage Options - Early detection strategies can be funded in a variety of ways including:

- 1) Existing early detection coverage limits within a medical plan (see A in Model Strategy, page 2);
- 2) Health risk management budget funded via the medical plan as a line item and/or via plan premiums/reserves;
- 3) Flexible medical/spending benefit accounts;
- 4) Organizational or departmental budget; and
- 5) Individual payment (e.g., #3, cash, credit card).

Core early detection screenings (B) offered at the worksite are best funded via #1, 2, 3 and/or 4. Supplemental (non-core) tests (F) are commonly funded via #1, 3 and/or 5.

Option 1 should be seriously considered since it capitalizes on a benefit (and funds) that should already be established. As such, the core screening becomes “cost neutral,” although actuarially, the projected reserve level for the benefit (1) may need to be adjusted considering the lower cost of worksite screenings, higher participation rates and overall return-on-investment of the screening and other health risk management components in place.

Worksite-Based Equipment - Blood pressure equipment, height-weight scales and other selected equipment can be located at worksites for ongoing use by employees. This is especially helpful for employees with chronic conditions (e.g., high blood pressure) on medicine who need to monitor themselves on a more frequent basis to assure ongoing treatment effectiveness. This and other equipment can be of value for individuals frequently monitoring progress toward health-related goals (e.g. weight, resting heart rate).

At-Risk Follow-Up - Those individuals with critical at-risk screening values should be called by a nurse within 24-hours to verify receipt of screening report, awareness of at-risk values and to encourage immediate follow-up with their personal physician. Ideally, aggregate group reports and data-mining can be used to determine needs for future targeted risk/disease management interventions, and to target communications to those individuals meeting the eligibility criteria for such interventions.

Meanwhile, access to online medical decision support can benefit all individuals regardless of risks to learn more about early detection tests, supplemental testing options, risks identified, diseases/conditions identified, evidence-based medicine (best practices treatment strategies) and more. Existing EAP and other services should also be reinforced as support resources for the entire population, especially those at-risk and/or with conditions.

Incentives - Participation rates can vary widely with or without incentives. If a model strategy is being implemented, incentives are usually unnecessary within the first 3-5 years, because high participation rates will normally be seen stemming from: the model strategy design; the core screening, its funding and time during work to participate being perceived as incentives; and the automatic participation of early adopters, the early majority and others (depending on the recent population-specific early detection related incidents (e.g., co-worker having cancer), communications, and leadership support).

In the absence of a policy (see below), supplemental incentives can be helpful in increasing participation rates. Examples of effective incentives for screening participation include: \$25 (cash at time of screening being more effective than deferred payment); Up to \$200 for screening participation (applied toward flex account or deductible); or \$10-\$20 per month reduction in monthly health plan premium contribution.

Considering the above, a conservative approach is recommended deferring incentives to later years and starting with lower cost incentives — or, considering a policy approach (below).

Policy Role - To minimize incentive costs and maximize participation rates and corresponding benefits, a growing number of organizations are requiring participation in core early detection screenings for eligibility and enrollment into richer medical plan options (e.g. PPO, POS) with non-participants having only an HMO option.

IX. Summary

The most significant recommendations for a model strategy of maximum success have been briefly discussed. It is given that other more in-depth papers exist, as do other strategy improvement recommendations. However, organizations implementing the recommended model strategy will be implementing a best practices strategy serving to maximize the success, results and returns-on-investment from such a strategy.

For More Information:

1. U.S. Preventive Services Task Force (1996). A Guide to Clinical Preventive Services - 2nd Edition. Baltimore:Williams & Wilkins.
2. Gorsky, Larson. Best Practices: Health Risk Management and Loss Control. HPN WorldWide; Elmhurst, IL (2002).
3. www.hpn.com/screenings.html
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