

**SMARTCare**  
*(Smarter Management and Resource Use for Today’s Complex Cardiac Care)*

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**I. OVERVIEW**

SMARTCare is designed to give better, more appropriate care at lower cost to patients experiencing chest pain due to heart disease. Today, many patients experiencing periodic chest pain receive tests and procedures that are unnecessary, expensive, and can actually be harmful to them. SMARTCare will give primary care physicians, cardiologists, and patients ready access to the latest scientific evidence about what tests and treatments are the most appropriate for their heart problems in an easy-to-use, electronic format, enabling them to make the best choices about tests and treatments. SMARTCare also will change the payment system for cardiac evaluation, testing, and treatment in order to deliver better outcomes at lower cost for Medicare, private purchasers, and patients, while also maintaining the financial viability of high-quality cardiac care in physician practices and hospitals.

**II. HOW CARE WOULD IMPROVE UNDER SMARTCARE**

When a patient is experiencing occasional chest pain and comes to a primary care physician or cardiologist for an evaluation, the physician would first determine whether the patient is at immediate risk for heart attack and needs to be hospitalized, and if not, the physician would attempt to rule out obvious causes unrelated to heart disease, such as gastrointestinal reflux disease or muscle strain, and also rule out heart problems other than stable ischemic heart disease.

**A. Use of the FOCUS Tool**

If it appears the patient is likely experiencing the symptoms of stable ischemic heart disease, the physician would use an electronic decision-support tool called FOCUS to help determine what the most appropriate next steps should be based on the patient’s history and symptoms. The FOCUS tool is based on the appropriate use criteria developed by the American College of Cardiology, and it incorporates the latest evidence regarding the benefits and complications associated with different tests and treatments for ischemic heart disease. The FOCUS tool would inform and support decision making by the physician and patient about the most appropriate care, but it would not

dictate a particular approach. In general, it would indicate which tests and treatments are usually *appropriate* for someone with the patient’s characteristics and symptoms, which other tests and treatments *may be appropriate in certain circumstances*, and what tests and treatments are *rarely appropriate*. The physician and patient would then decide what is best for the patient, informed by those guidelines.

In some cases, the physician would send the patient for a *non-invasive stress test* to evaluate the extent of their heart disease. In other cases, the physician would first prescribe *medications* for the patient to determine if that would control their symptoms and their disease. If it is determined the patient needs a stress test, the FOCUS tool would help the physician and patient determine *which type of stress test* is the most appropriate. There are many different types of stress tests; some have much greater ability to determine exactly how severe someone’s heart disease is, but they involve greater risks to the patient, they are more expensive, and when used for patients with mild symptoms or low risk factors, they have the disadvantage of also having a higher “false positive” rate, i.e., they can indicate that heart disease is present in someone who really doesn’t have serious disease. Consequently, using these tests is undesirable if they are not necessary or used in patients with a low chance of having heart disease.

## **B. Use of PRISM and Shared Decision-Making Tools**

If the stress test indicates that the patient does have more than a minimal level of heart disease, the physician and patient would then discuss what to do next. It might be appropriate to do an additional, *more sensitive stress test*, or it might be appropriate to do an *angiogram* in a cardiac catheterization laboratory. While an angiogram provides the clearest information on the severity of any artery blockage a patient may have, it is an invasive procedure and has greater risks to the patient. One of the goals of SMARTCare is to reduce unnecessary use of invasive imaging that could be more harmful than helpful to patients. Moreover, it is important for the patient to determine what action they will take based on the results of the angiogram – would they do best with a *stent or cardiac bypass surgery* if the test shows significant blockage, or would they prefer to simply manage their disease with *medications*.

There is often no “right” answer to this decision. Under SMARTCare, the FOCUS tool would help the physician and patient make the best decision about additional testing; in addition, the physician and patient would use the ePRISM tool to help determine the most appropriate decision about whether to use a stent, what type of stent would be appropriate, and how best to minimize the chance of any unwanted complications from the stent procedure. The patient would also have access to education materials and shared decision-making tools to help them make those choices in collaboration with their physician.

## **C. Use of INDIGO**

Regardless of what testing and interventions are used, it will be important for all patients to take appropriate action to *reduce their risk of developing more severe heart disease* that could lead to a heart attack as well as painful angina (chest pain). Under SMARTCare, physicians would be able to use the INDIGO tool to help patients better understand (a) the risk they currently face given their family history, habits such as diet, activity, tobacco use, and existing level of heart disease, and (b) the reductions in risk that could be achieved through changes in diet, changes in activity, use of different types of medications, and other interventions. INDIGO creates a customized personal risk profile for various combinations of medication and lifestyle interventions. In addition, the use of Cardio-Smart and patient education tools would maximize patient understanding of their risks and how to address them.

## **D. Continuous Improvement Through NCDR and PINNACLE**

Although the SMARTCare tools will help physicians and patients make better decisions about care today, they will also help physicians and patients make even better decisions in the future. This is because the FOCUS and ePRISM tools are not merely static “guidelines,” they are also *data collection tools*. The choices physicians make using the tools, and the outcomes their patients achieve, will be recorded and used in two important ways:

- **Individual physicians will receive feedback on their own ordering patterns.** For example, if a physician had a high rate of ordering stress tests for patients where those tests “may be” appropriate, the physician would be able to see whether other physicians were achieving similar or better results for similar patients by using fewer tests or less risky and invasive tests.
- **The appropriate use criteria will be improved.** Through SMARTCare, the teams of physicians who develop and maintain the appropriate use criteria would have more detailed data available to use for refining

the criteria and providing clearer guidance as to which tests and procedures are likely appropriate or inappropriate in more unusual cases. The data collected will be added to the PINNACLE registry and the NCDR registry to support research about outcomes and the refinement of existing criteria.

## **E. Quality Assurance**

SMARTCare physicians would collect and report on a series of quality and performance metrics to assure patients and payers that patients were receiving truly better care and achieving better outcomes at lower cost. This would include measures of patient experience as well as clinical quality measures.

## **III. COSTS AND SAVINGS EXPECTED FROM SMARTCARE**

### **A. Fewer Unnecessary Tests and Procedures**

Today, due to misinformation about the nature of heart disease and about the benefits of different tests and treatments, many patients end up receiving unnecessary testing, unnecessarily expensive or invasive testing, and unnecessarily expensive and risky interventions. SMARTCare is designed to ensure that patients who really need tests and interventions receive the most appropriate ones, while sparing the others the risks and costs associated with unnecessary tests and treatments. SMARTCare is expected to reduce spending in the following ways:

- Reducing unnecessary use of stress tests. Currently, about 15-20% of non-invasive imaging tests do not meet appropriate use criteria, and SMARTCare could enable this to be reduced to less than 8%.
- Reducing unnecessary use of the most expensive and risky forms of stress tests, such as nuclear imaging.
- Reducing unnecessary use of invasive imaging, i.e., angiograms.
- Reducing unnecessary use of percutaneous coronary interventions (stents). Currently, 9-20% of stent procedures do not meet appropriate use criteria, and SMARTCare could reduce this to less than 6%.

While savings from fewer tests and procedures will be significant, it is important to recognize that the true savings will be less than the current amount that payers are paying for the avoided tests and procedures. There are fixed costs associated with a cardiology practice, a cardiac testing facility, and a cardiac catheterization laboratory which must still be covered even if fewer tests and procedures are performed. Consequently, changes in the payment system will be needed to allow cardiology practices and hospitals to reduce unnecessary spending without jeopardizing their ability to continue providing the appropriate tests and procedures to the smaller number of patients who do need them.

### **B. Elimination of Prior Authorization**

Today, many health plans have required that before the cardiac tests or procedures ordered by a physician can be performed, a health plan employee or a contract firm has to review the case and approve the order. Not only does this delay the delivery of appropriate care to the patient, it increases administrative expenses for the health plan and for the physician. Only the patient's own physician understands the facts and circumstances regarding the patient well enough to determine what is appropriate for them; SMARTCare will provide a mechanism so that physicians can do their own review of appropriateness, rather than having a health plan or other entity do so. This will reduce administrative costs for both health plans and physicians.

### **C. Costs of Decision Support Tools**

There is also a cost to SMARTCare, however. FOCUS, PRISM, and INDIGO all require money to install in a physician's practice and to maintain with the most current information available. Collecting the information, adding it to NCDR and PINNACLE, and providing performance feedback to physicians also involves costs. Although these costs should be more than offset by the savings from avoiding unnecessary tests and procedures and eliminating the costs of prior authorization systems, there is no direct way to cover these costs under current payment systems, so payment reform is needed to enable implementation of SMARTCare.

## IV. PAYMENT REFORM NEEDED TO SUPPORT SMARTCARE

### A. A Bundled Payment for Diagnosis and Treatment of Stable Ischemic Heart Disease

The ideal payment to support SMARTCare would be a single condition-based payment, paid to a SMARTCare provider for each patient requiring evaluation and treatment of new or significantly changed symptoms of stable ischemic heart disease. This payment would replace all current physician fees and facility-based payments for evaluation and management, testing, and PCI procedures for these patients during the six month period from the time they first seek care. The SMARTCare provider would have the flexibility to use the payment to redesign care while assuring payers such as employers, health plans, and Medicare that spending would be lower than it is today and that the quality of care would remain high. The amount of the payment would be determined as follows:

- The amount would be lower than what Medicare or a health plan is currently spending on current fees and payments for evaluation and management, testing, and PCI procedures for the patients.
- The amount would be adequate to cover the costs the SMARTCare provider will incur to (a) implement the new decision-support tools and (b) deliver the appropriate care, tests, and procedures to the patients.
- The amount would be risk-adjusted based on the severity of the patient's symptoms and risk factors, as evaluated through the FOCUS tool and other information.

Only patients appropriate for the SMARTCare payment model would be included; for others, payments would continue to be made under the current fee-for-service payment system.

- **Included patients** will be those with either (a) previously diagnosed coronary artery disease (for example, those who have had a previous heart attack, bypass surgery, or cardiac catheterization documenting the presence of disease) who are experiencing significant worsening of symptoms or (b) patients without known coronary artery disease but who are experiencing stable symptoms such as chest pain that suggest coronary artery disease might be present.
- **Excluded patients** will be primarily those with *unstable* ischemic heart disease and those whose symptoms may represent impending myocardial infarction ("heart attack"). The reason for excluding these patients is that current evidence suggests that routine use of invasive procedures is warranted in these patients, and that nationwide the appropriateness of such high-cost but highly effective procedures is already greater than 90-95%. Also, patients who have had heart surgery to correct birth defects within the heart will be excluded.

### B. A Transitional Payment Model

In order to facilitate the transition to the bundled payment model, it may be necessary to temporarily use an alternative payment model that provides some of the same flexibility and accountability as the bundled payment model. This transitional payment model would have the following components:

- **A SMARTCare management fee.** The SMARTCare provider would receive a monthly payment or a single lump sum for each patient, in addition to any fees or payments for specific services provided. This management fee would enable the SMARTCare provider to cover the costs of the additional support tools as well as to cover the additional time spent in patient education, outreach and follow-up with patients, etc.
- **A pay-for-performance bonus/penalty payment.** The SMARTCare provider's management fee would be adjusted up or down based on the payer's risk-adjusted total spending on cardiac-related visits, testing, and procedures for the SMARTCare patients and based on performance on quality measures. A target spending level would be defined in advance based on average total spending for similar patients in the most recent year, but adjusted downward by a pre-defined amount to offset the additional spending on the SMARTCare management fee. (In other words, if spending on visits, tests, and procedures were below the target level, the payer would be spending less than they would have expected to spend otherwise, even after paying the SMARTCare management fee.) The amount of bonus/penalty would be proportional to (a) the amount by which the risk-adjusted total spending for the SMARTCare provider's patients was above or below the target spending level, and (b) the amount by which the SMARTCare provider's risk-adjusted performance on quality measures was above or below average compared to other cardiac care providers.

The pricing, risk adjustment, and inclusion/exclusion criteria would be defined similarly to what was described above for the bundled payment model.