

# Using EHRs for Quality Improvement: Heart Failure

## Heart Failure

Dr. Liu has attested to Meaningful Use and his first incentive check is in the mail. He has harmonized his elective quality measures around heart failure because he knows his EHR product is certified for heart failure measures. Dr. Liu also consistently gets the same denominator with accurate reports. Dr. Liu discovers that for patients with heart failure and left ventricular systolic dysfunction (LVSD), the percentage of patients in his practice appropriately prescribed ACE inhibitors or ARB therapy (NQF #0081) is much lower than he'd like. Dr. Liu's REC representative works with IT staff and his vendor to review his system's functionality, repeat the reports, and confirm they are accurate. Knowing these patients are at very high risk of myocardial infarction or other major coronary events, Dr. Liu wants to learn about systematic ways to improve. First the REC advises Dr. Liu to use the appropriate personnel and method for his EHR product to utilize the patient list function to identify the names and phone numbers of all patients in his practice with heart failure and LVSD that have not been seen in the last 3 months and are not on ACEI or ARB therapy. The REC then presents Dr. Liu with these potential options:

## Engage at Risk Patients

- Schedule individual office visits purely dedicated to cardiovascular care where prescription history is reviewed
- During visit systematically review patient history for exclusions, e.g. cough, renal failure, hyperkalemia, allergy, angioedema, or pregnancy
- Discuss with patient whether ACE inhibitors or ARB therapy causes any intolerable side effects; explore any barrier to adherence
- If ACE inhibitors aren't tolerated then discuss other options

## Use EHRs to Engage Patients

- Activate clinical decision support to:
  - Highlight missing cardiovascular services at every visit

- Suggest the need for ACE inhibitors or ARB therapy
- Have the need to check serum creatinine and potassium highlighted as a patient safety feature
- Survey problem list for contra-indications / exclusions
- Use the e-prescribing system to:
  - Obtain prescription and refill history if an ACE inhibitor is recommended or required
  - Have a staff member perform a medication reconciliation
  - Have a staff member perform an adherence analysis either electronically or through patient discussion
  - For medication use, have staff review progress notes or medication list
- Use patient education function
  - Use print-outs, websites, and/or kiosks specified for a low-health literacy audience
  - Have staff use it to assess patient knowledge and use teach back at subsequent visits

## Implement a Workflow that Supports Quality Improvement

- Start this change cycle and workflow with one provider:
  - Perfect the mechanics and team roles
  - Repeat process measures to see if process is consistent
  - Repeat measurement and assess if improvement has occurred
  - Employ a "team huddle" before each of these clinic sessions
    - Review the patients who have had difficulty with adherence from the entire staff's perspective
    - Ensure that appropriate lab work is gathered and / or ordered per warnings above
    - Divide important educational tasks
- Spread to other providers and set up staff meetings to give provider-specific feedback
  - If the feedback is public in a peer group, the incentive to adhere to the workflow and achieve improvement is intensified