FISHBONE (ISHIKAWA) DIAGRAMS

One of the more popular tools used in process improvement is the *fishbone diagram*, otherwise known as the *Ishikawa diagram*, named after Kaoru Ishikawa, who developed it in the 1960s. A fishbone diagram is perhaps the easiest tool in the family of cause-and-effect diagrams that engineers and scientists use in unearthing factors that lead to an undesirable outcome.

FIGURE 5 below shows a fishbone diagram created by Palladia, Inc., that enabled them to analyze the problem of low continuation rates. The working visual metaphor is that of a fish, whose “head” indicates the particular problem being analyzed, and whose skeleton consists of “bones” representing potential causes of the problem. The steps in creating a basic fishbone diagram are straightforward.

1. Brainstorm the potential causes of the problem using any method, such the nominal group technique.
2. Group similar ideas/concepts together.
3. Choose the biggest problem area—either by voting or by consensus—and brainstorm ways to solve it. If the problem is too complex, break up the diagram into smaller, manageable parts.

There are many variations to this basic process, and teams should be able to adapt it to their particular needs and constraints. As FIGURE 6 below
demonstrates, Asian Counseling and Referral Services not only identified potential causes to the problem of delay in time from first request to first treatment, but simultaneously identified potential solutions for each of these, maximizing their efforts.

A fishbone diagram is an easy tool that facilitates quick analysis of key problem areas that “keep the CEO awake at night.”