

USING KNOWLEDGE MANAGEMENT TOOLS IN THE SAUDI NATIONAL MENTAL HEALTH SURVEY HELPDESK: PRE AND POST STUDY

INTRODUCTION

With the growth of information technology, there is a need for the evaluation of cost-effective means of monitoring and support of field workers involved in large epidemiological surveys. The aim of this research was to measure the performance of a survey help desk that used knowledge management tools to improve its productivity and efficiency.

METHODS

KNOWLEDGE MANAGEMENT TOOLS

Given the magnitude and complexity of our survey, using state of the art technology, a help desk support team was established mainly to facilitate fieldwork operations by recording, tracking and solving reported incidents. Figure 1 depicts the knowledge management tools used by SNMHS.

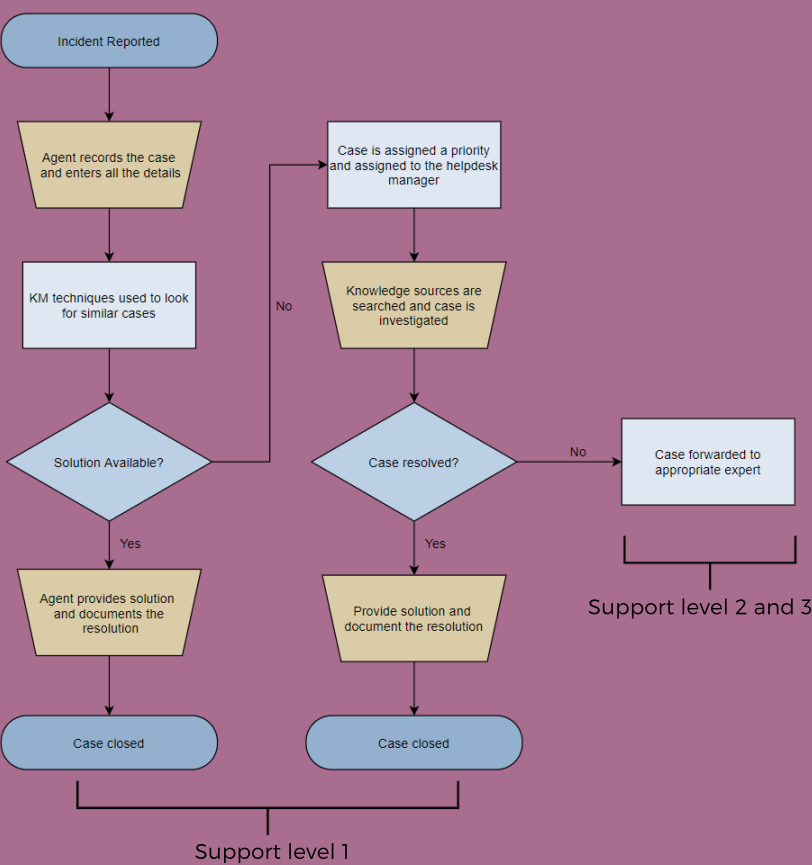


Figure. 2

The help desk agents followed a specific process for handling the various issues that arose from fieldwork (see Figure 2). Once an incident is reported the agent assigns the case a priority level (low, medium and high) and either:

- resolves the problem immediately at the first level of support (Help desk agent) and closes the case
- escalates the problem to 2nd level support (help desk manager & survey project manager) or 3rd level of support (specialists from University of Michigan)

DATA COLLECTION

The data collected in this paper to measure the efficiency of the knowledge management tools used by the help desk was extracted from the cases entered in the Call Ticketing System. The cases were then divided into two Phases. The key performance indicators used to measure the help desk's performance included:

- The number of calls resolved at first contact
- The average time to resolve a problem at each priority level

RESULTS

Figure 3 shows the summary output for Phase I and Phase II. The case resolution time, reported in hours, referred to the time between logging a problem call and the time the problem is resolved. The median reductions between Phase I and Phase II are significant for all outputs expect for medium priority cases. The average time for resolving cases in Phase II was 84.7% lower than Phase I. At the low, medium and high priority level, Phase II outperforms Phase I.

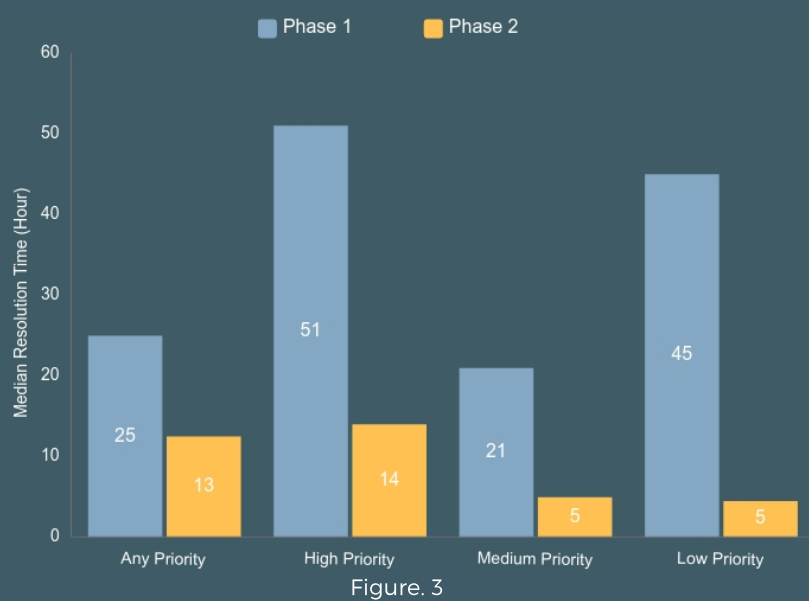


Figure. 3

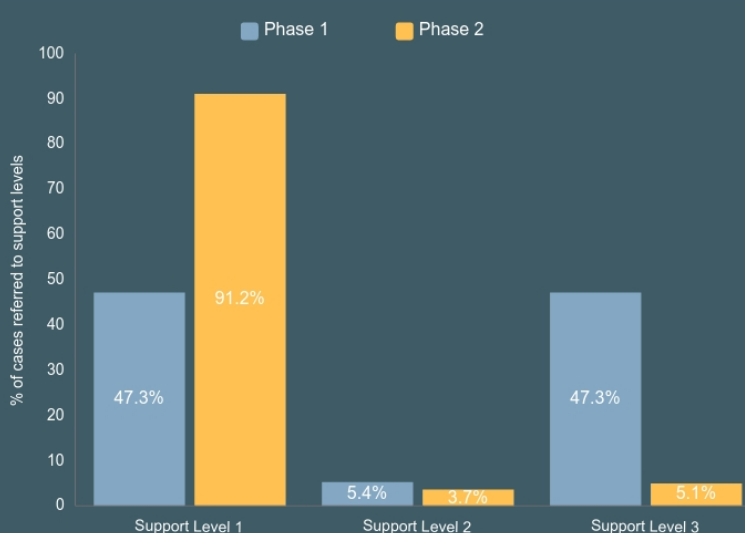


Figure. 4

Figure 4 shows the percentage of cases that went to each support level. In Phase II, there was a decrease in the percentages of cases referred to second and third level support, of 66.6% and 92.1% respectively. On the other hand, there was only a 28.9% increase in first level support.