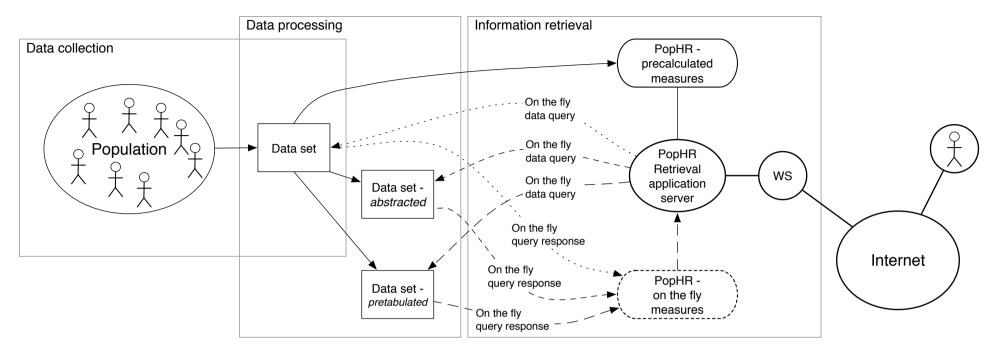
Figure 2. PopHR and PopHR system showing collection, processing, and retrieval of information content from a PopHR



Legend

Data set PopHR

WS

User accessing PopHR content

 Data set that is a source of content for the PopHR

 PopHR
 (PopHR)

 "On the fly" PopHR content

Standard PopHR data processing

"On the fly" data query, processing, and retrieval
 Connections among different parts of information system (solid line) or with the Internet (dashed line)

Web server

Caption for Figure 2. Data for a population are collected using any of various methods, such as surveys, environmental monitoring, and abstraction of health records. These data are compiled and processed to form a population data set. The data set is then analyzed to produce a set of population health measures, which are stored in the PopHR for later retrieval. To increase retrieval efficiency and speed, the PopHR system might use intermediate data sets in which one or more large data sets would be reduced in size by either selectively removing infrequently used data elements to form an "abstracted data set," or pre-tabulating and indexing the data set on frequently retrieved data elements. In response to a user query of the PopHR, the PopHR system would retrieve information from either the PopHR with precalculated measures (a standard PopHR information retrieval), or one or more primary or intermediate data sets (an "on the fly" PopHR information retrieval). For some queries a combination of standard and "on the fly" retrievals might be necessary. The retrieved information would then be synthesized into a response and communicated to the user via the Internet.