CLINIC AND LAB INSPECTIONS IN THE AGE OF MOBILE DEVICES AND THE INTERNET

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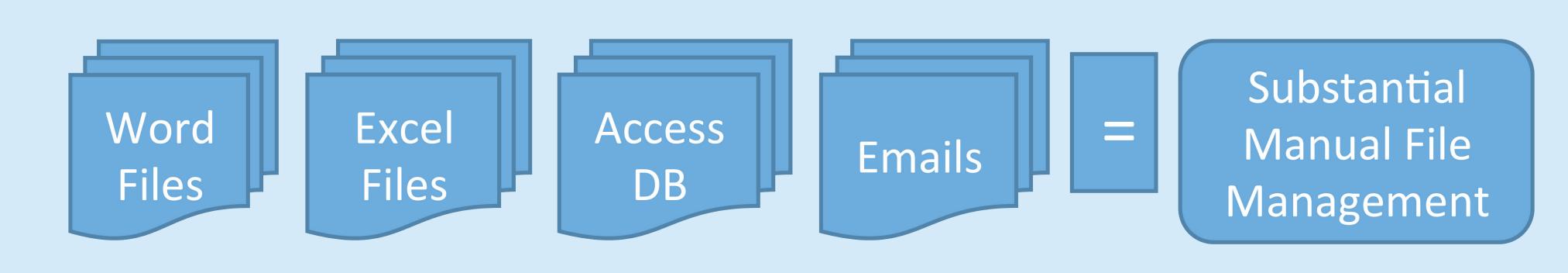
INTRODUCTION

In this age of prolific use of mobile devices, the internet, and sophisticated software systems, it was felt the University's old inspection process and its associated systems were getting dated, and lacked benefits that could be obtained from using a more current technology involving recent software designed for inspections and internet/mobile device usage. Benefits such as:

- Increased productivity by completing inspection reports in the field.
- Automatic electronic notifications to Clinic Managers and Principal Investigators (Pls), eliminating the need to manually create emails and track responses to issues.
- Improved customer satisfaction by providing Clinic Managers and PIs direct access to their inspection data via secured web browser and the issues they need to resolve.
- Use of integrated data to keep track of needed inspections and open issues.

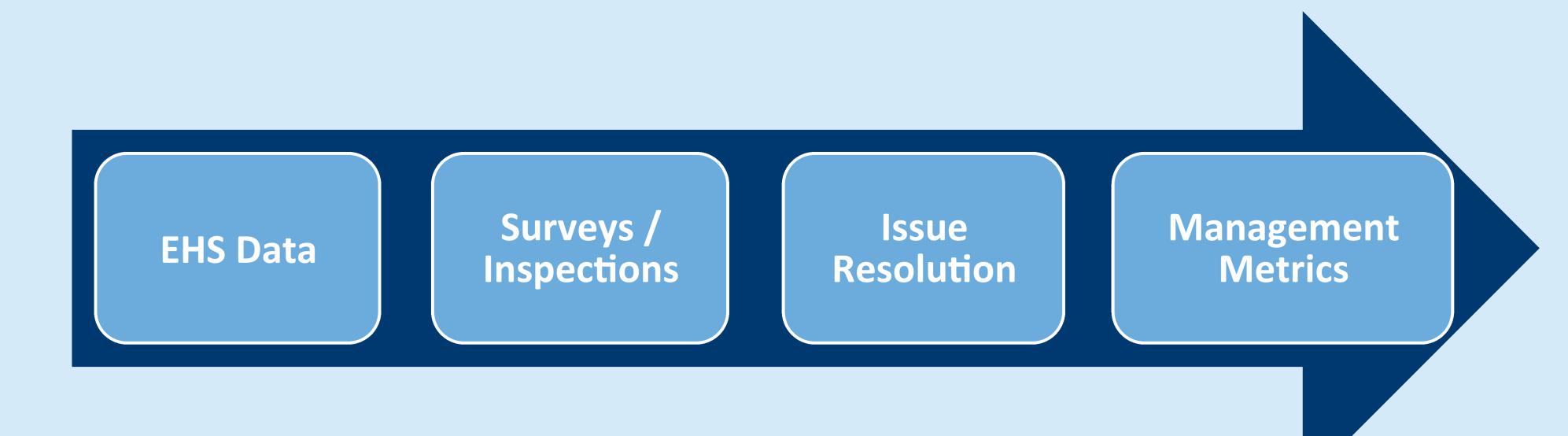
METHOD

The old inspection process involved the use of Microsoft Access, Excel, Word and Email silo apps, which required a lot of effort to create/track individual files:

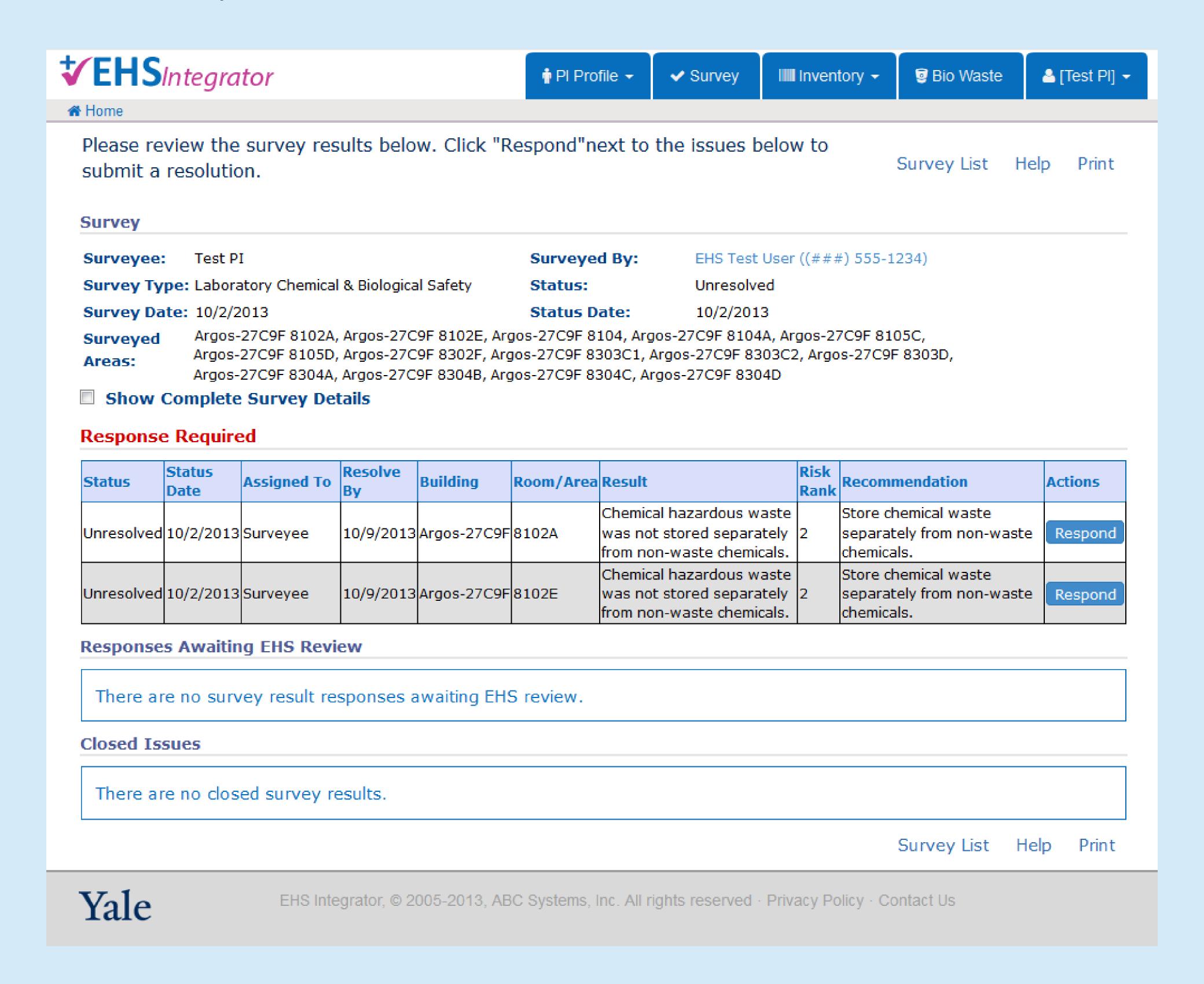


None of the systems were directly accessible with mobile devices from the field or by Clinic Managers and Pls. We were using paper and pen in the field to record results, transferring them to one or more of those systems, emailing individual documents to customers, such as Pls or Clinic Managers, and then trying to make sure appropriate email responses were received for issues found. There were also the common data silo issues of needing to rewrite the same data over and over. The following objectives were defined for the new system:

- Leverage existing EHS data to identify what surveys need to be performed.
- Create and perform surveys in the field with immediate sending of results.
- Allow customers to respond to issues online and permit EHS to accept/ reject them.
- Provide tools that allow the overall inspection process to be optimized.



We worked with ABC Systems, Inc. to enhance their EHSIntegrator platform to meet our needs. Their system provided a productive Windows Client for EHS Staff, in addition to streamlined web pages for our customers so they could see their data and respond to issues, as shown below:



Specifically, our new system leverages other EHS data and modules to identify which Clinics and Labs need to be inspected, and by whom. It includes what activities, equipment, and assistants exist in those areas, and who's the contact.

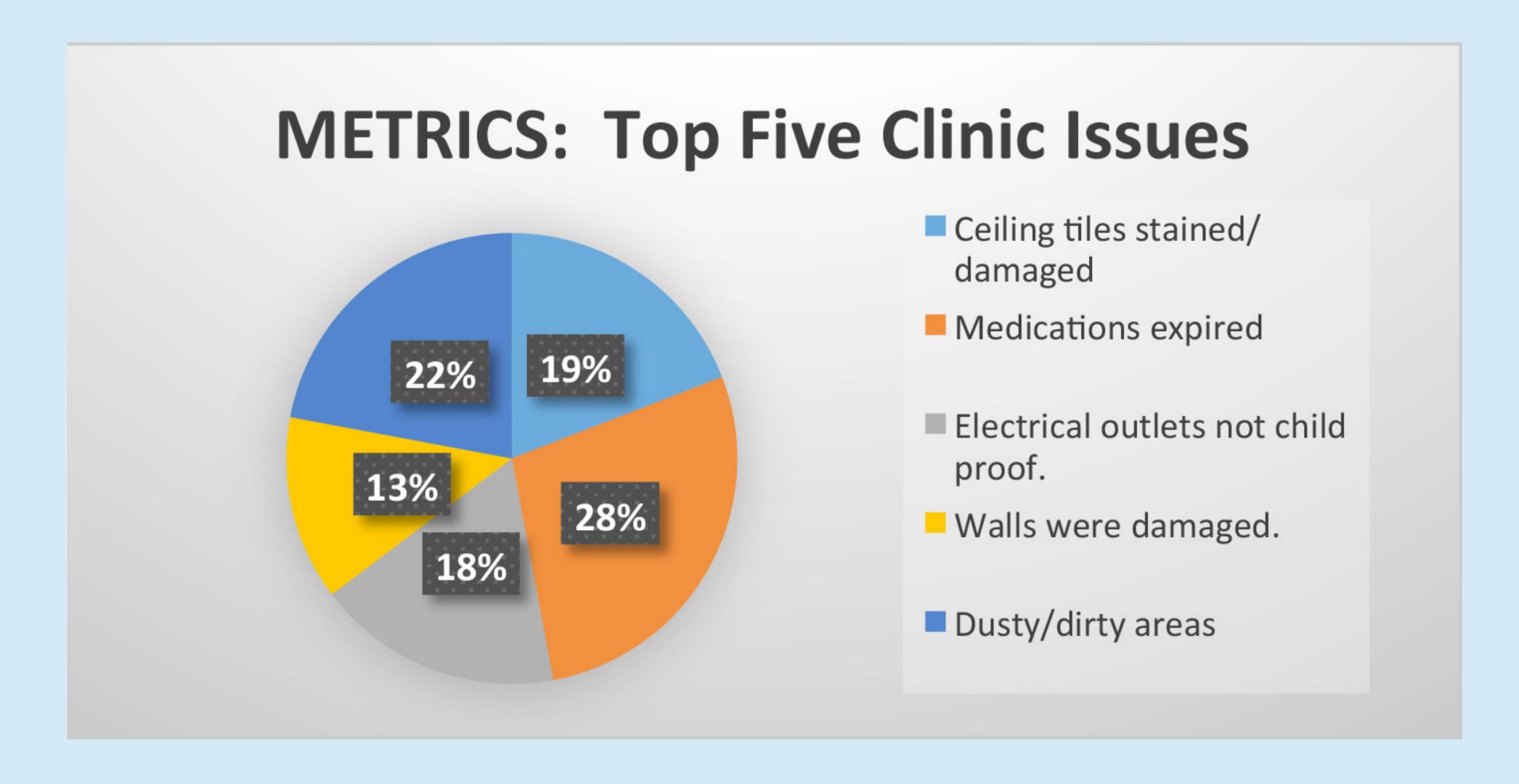
For each inspection, the system allows tracking of detailed information, such as, assigned inspector, inspected rooms, activities and personnel. Plus the complete checklist used and all answers recorded against it. A pre-survey guide is available for viewing training compliance, equipment lists, and hazard usage.

Inspectors can use a mobile device (i.e., iPad) in the field, to modify data, complete inspections and send the completed inspection survey notice about issues needing resolution to the Clinic Manager and PI, which they can respond to easily online.

The system keeps track of all issues and automatically emails reminders for any issues remaining open. When individuals respond to an issue, an email is sent to the original surveyor who has the chance to accept/reject each response. The survey remains in an unresolved state until all issues are resolved. Queries and metrics are available to identify all survey data, issues, and resolutions.

The system has a number of single-click features to speed up operations. For example, when conducting an inspection of a room shared by multiple Pls you can easily send the report to multiple Pls or duplicate the results in a new survey under another Pl with a click of a button.

The system lets you see how many inspections are needed for the current year and what total percentage of them has been completed in the current cycle. It also produces many metrics, for example, the top five issues for clinic inspections:



RESULTS

The following results were all realized after the full adoption of the new system:

- Better EHS productivity: Having a single integrated system reduced the complexity and effort of managing the entire inspection process.
- Quicker turnaround times: Reports turn up in Clinic Manager and PI email boxes before inspector leaves area, and they can respond immediately.
- Increased customer satisfaction: Customers like the paperless reporting feature, getting reports quickly, and having data accessible online.
- Better compliance: Tracks which surveys remain to be done, including ones for new areas and activities as they are added. It also provides tools to prevent issues from being over looked and to easily record their resolution.
- Management metrics: Metrics for surveys completed or to be done; along with issues occurring with most frequency allows for focusing resources.
- All data, all the time: All inspection data online and can be easily queried.

CONCLUSION

The move to mobile devices and an adaptable integrated system has not only met but exceeded our expectations. Access to data in the field has improved EHS staff productivity. Customers are more satisfied with quicker responses, data availability through secure website and better compliance and accountability.