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Allergic to Change

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The challenge

Bob Dawson, a recently appointed Executive Vice President of Revenue at General Health and Medical Center (GHMC)[1], was concerned about developments surrounding the financial stability of the organization. Like many hospitals across the country in the early part of 2016, GHMC suddenly found itself in a tough financial situation. Years of inefficiencies were masked by increasing premiums. As regulatory pressures mounted and competition increased, the losses started to accumulate.

Were it not for his efforts, GHMC would be in a direr financial situation than already existed. Bob had a background in Lean Six Sigma and understood that improvements to the bottom line could come from the implementation of performance improvement initiatives. His organization was able to find significant additional revenue through various inter-department/division initiatives. He and his team went from one of the worst in revenue cycle performance to one of the best in the world. But Bob knew that there needed to be a broader effort across the entire organization in order for GHMC to be a financially sustainable organization. Despite the improvements in revenue, GHMC was projecting to lose money (in millions of dollars) out into the foreseeable future. See Exhibit 1: Financials

Bob served on the board that oversaw the Performance Improvement Division of GHMC. Numerous performance improvement projects were brought before the board to consider. In some cases, the projects, while valuable in other ways, lacked the financial impact that he and others hoped for. After some time, it was decided that improving clinical operations in the various departments might be a way to improve overall performance. Numerous departments were considered. Some requested help in different areas.

The Allergy and Immunology Department requested help with patient access. After making improvements in the areas Bob was initially assigned, leadership at GHMC gradually increased his responsibilities and scope of authority. He had recently picked up responsibility for patient access and this concern of the Allergy and Immunology Department caught his attention. A performance improvement project manager was appointed. The performance improvement project manager submitted the following report:

[1] Protagonist name and hospital name have been disguised.

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Allergy Overview

The purpose of this report is to provide leadership in GHMC with an initial assessment of the challenges the Allergy and Immunology Department faces. The structure of this report will include a synopsis of the analysis of capacity, demand and patient experience.

Capacity

The Allergy Department, as currently configured, has a mismatch of capacity. There are multiple aspects of capacity within the department. There are physical capacity, physician capacity, and staff capacity. Other variables that impact on capacity include patient access, availability of equipment and the utilization of space.

Physical Capacity: Physical capacity within the department is sufficient to handle 3 full-time physicians seeing patients every day. There are two check-in rooms, six exam rooms, three skin test rooms, one waiting room, one skin test waiting room, and one special testing/treatment room. The capacity for special testing and treatment is limited to two patients at a time. The capacity for the injection area is limited to two patients at a time. The waiting room area can seat up to 20 patients at a time. There are different types of patients that are served. Some are returning patients which may include those that only require injections, while others are new patients that typically require a more thorough examination. See Exhibit 2: Current Workflow – Departmental Overview.

Physical capacity and workflow are linked as the workflow impacts throughput. There are different models for a workflow that Allergy departments use. Most of the patient movement occurs between the exam rooms and the skin test rooms. See Exhibit 3: Current workflow – focused view (patient and physician movement). The workflow model that is currently in use has the patient go through check-in to the exam room. Once the exam is complete, the patient, if necessary, picks up their belongings and moves to the skin test room if it is available. If it is not available, the patient moves to the skin test waiting room. Once the skin test room becomes available the patient moves into it. An initial test is performed, and the patient moves back to the skin test waiting room to wait for 15 minutes and determine if there is an indication of an allergic reaction. After this is complete, the patient then moves back to the skin test room to have a reading done and another test administered. Once this second test is complete the patient moves back to the skin test waiting room for another 15-minute wait to determine if there is an indication of allergic reaction. Once this is complete, the patient moves back to the skin test room for a final read on the test and preparation to see the physician. If an exam room is available, the patient moves to the exam room. If an exam room is not available, the patient moves to the skin test waiting room. Once the exam room is available the patient would move to the exam room to be seen by the physician for a follow-up appointment.

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A patient could be moving many times before the process is complete. For example, one path could include the following steps; check-in, waiting room, exam room, skin test waiting room, skin test room, skin test waiting room, skin test room, skin test waiting room, skin test room, skin test waiting room, exam room. Each patient must move at least 5 times. At full capacity, there are three skin test rooms that could potentially be feeding the same skin test waiting room.

Physician Capacity: While there are five physicians in the department, not all of them work in the department every day. Schedules are set such that there are at least three physicians in the department at any given time.

The physician's current schedule exceeds the physical capacity of the facility during three days of the week. During those days, four physicians are scheduled to see patients. Given the current workflow and the number of rooms available, there would be long patient waits if all four physicians were fully booked with appointments that included a mix of new and existing patients on those days.

Some physician schedules are not as productive as they would like to be or that their department would like them to be. Other physicians are exceeding their number of budgeted appointments. Depending on location, physicians are either very busy or not busy enough. Only two out of the five physicians can see pediatric patients under 4 years old. Both of their schedules are typically full. No show appointments and same day cancel limit the productivity of the physicians.

Staff Capacity: Staff capacity is limited and, given the current configuration of workflow, would be unable to keep up with the demand if the physician schedules were full. The staff is made up of six nurses, three medical assistants, a pharmacy rep, and two administrative staff. Nurses must keep up with injections, special testing, special treatments, skin testing, and other duties. There are no triage nurses handling phone calls. There are no scribes. The staff is short of two nurses. See Exhibit 4: Organizational Structure.

Demand

Demand for services from the staff in the Allergy and Immunology Department varies according to a set of variables that includes location, physician schedules, patient access, leakage, and marketing efforts.

Physician Schedules: Some existing patients must wait over 60 days to schedule an appointment with a physician because his schedule has all existing patient slots booked. Schedules for physicians include new patient appointments that contain an initial 30-minute appointment and a follow up a 20-minute appointment. These appointments are not always scheduled, and the schedulers must call the department to seek permission before converting them to existing patient appointments.

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Schedulers must also check to see if skin test rooms are available before booking a new patient appointment.

Patient Access: On average, there were 44 calls per day during the year. Appointments have averaged 94 per day. The data for both these variables have remained relatively flat with high variability but no discernible upward trend. Patient access has made improvements to the call abandonment rate which has been as high as 18% but currently is at approximately 6%. Much of this variation may be attributable to staff turnover which has been high. At this point, we are unable to measure call blocking. There is a capability to do online scheduling in Epic[2], but it has not been used and there are no plans to use it.

Leakage and Marketing Efforts: In the last year, almost $500,000 worth of charges went out of network for allergy care. At this point, there are no online scheduling applications, such as ZocDoc, in use that would give additional exposure to the department. The department does not have a presence on social media. Physicians are not out routinely giving talks or actively promoting the department.

Patient Experience

When someone from GHMC calls a patient, the system deliberately sends out a number that does not exist to the patient's caller id on their phone. GHMC does this so that the patient cannot directly call the physician back and overburden the physician with phone calls. When the patient calls the number back, they get a busy signal and keep calling back. Eventually, they give up because they get frustrated and can't get through. This confuses and frustrates patients and they complain about it.

Patients entering the department are greeted by the Patient Access Representative at the desk immediately to the patient's right. There is a dialogue that takes place regarding information necessary to verify appointment, authorization, etc. There is no privacy. When it is busy, the line gets long. There is only one Patient Access Representative at the desk even though there is physical capacity for two. The same Patient Access Representative is expected to schedule follow up appointments, assist in monitoring the waiting room for injection patients, answer the phones, and schedule appointments from the work queue. Wheelchair access to the Representative's desks is not acceptable and given the current configuration, only exacerbates the lack of privacy.

Patients cannot schedule a follow-up appointment more than 6 months out. If a patient has a follow-up appointment more than 6 months out, then the patient records get put in the work

[2] Epic is an electronic medical record system with similar capabilities of a typical ERP-enterprise resources planning system. It has additional capabilities catering to the field of medicine to include online scheduling, online viewing of medical records, analytics, mobile, revenue cycle, and distance care.

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queue in Epic. No single person is responsible for the work queue. Patient records, including new patient referrals, wait a very long time with no action.

The current model of workflow deliberately increases patient movement and risk throughout the process. Patients in the skin test waiting room are in gowns in a mixed gender and age setting with no separation. This situation has generated complaints from patients.

To change or not to change?

As Bob looked over the initial report from the performance improvement project manager, he was surprised by some of what he learned. Some of the peculiarities associated with the Allergy department were new to him but the rest of the challenges he had seen before. He was sure that changes, if implemented, could help not only the Allergy and Immunology Department but other departments as well.

He also knew the employees working in that department had been there a long time and they were resisting change. Even some in leadership were unconvinced that change was necessary now or in the short term. They seemed to be lacking a sense of urgency.

Small incremental changes were not going to make the performance of the department increase the way that it could. If radical changes were implemented, leadership would have to get very involved to ensure that everyone did their part. The financial situation was not waiting. Losses for GHMC continued to mount. There was an opportunity cost for not making changes. The project manager needed to deliver sound recommendations that would have a significant financial impact along with a detailed plan for implementation.

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Exhibit 1: Financials - Operations

GHMC- Consolidated Statement of Financials *(in thousands of dollars)*

	Mar 2017	Mar 2016
Operating revenues		
Net patient service revenues	717,641.25	707,889.75
Other operating revenues	33,455.25	33,510.75
Total	751,096.50	741,400.50
Costs		
Salaries and wages	286,506.00	273,955.50
Physicians salaries and wages	85,281.00	79,643.25
Employee benefits	97,595.25	93,075.00
Supplies and Other	252,264.00	245,086.50
Depreciation	39,483.75	40,161.00
Interest	7,168.50	7,258.50
Health safety net assessment	10,805.25	4,673.25
Administrative and other costs Total	779,103.75	743,853.00
Income (loss) from operations	(28,007.25)	(2,452.50)

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Exhibit 2: Current workflow - Department overview

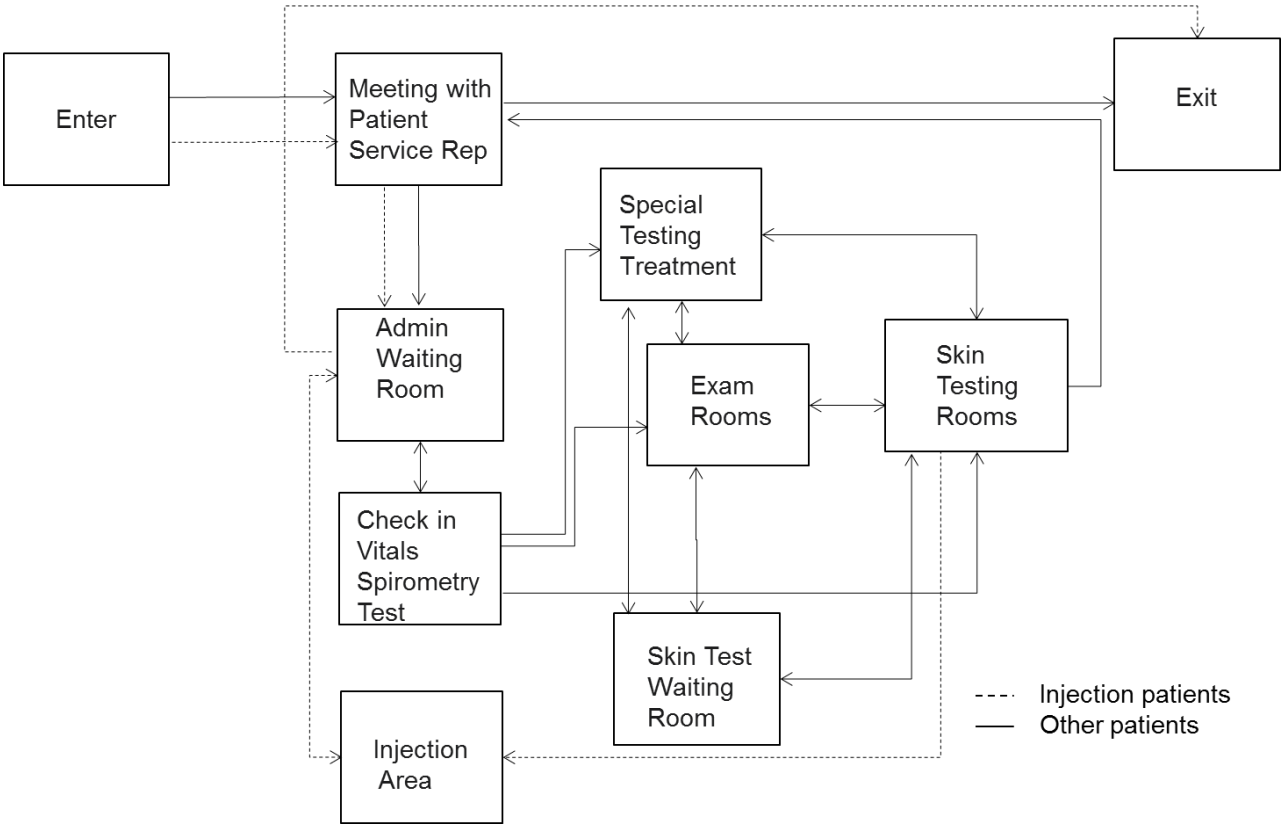

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Exhibit 3: Current workflow – focused view (patient and physician movement)

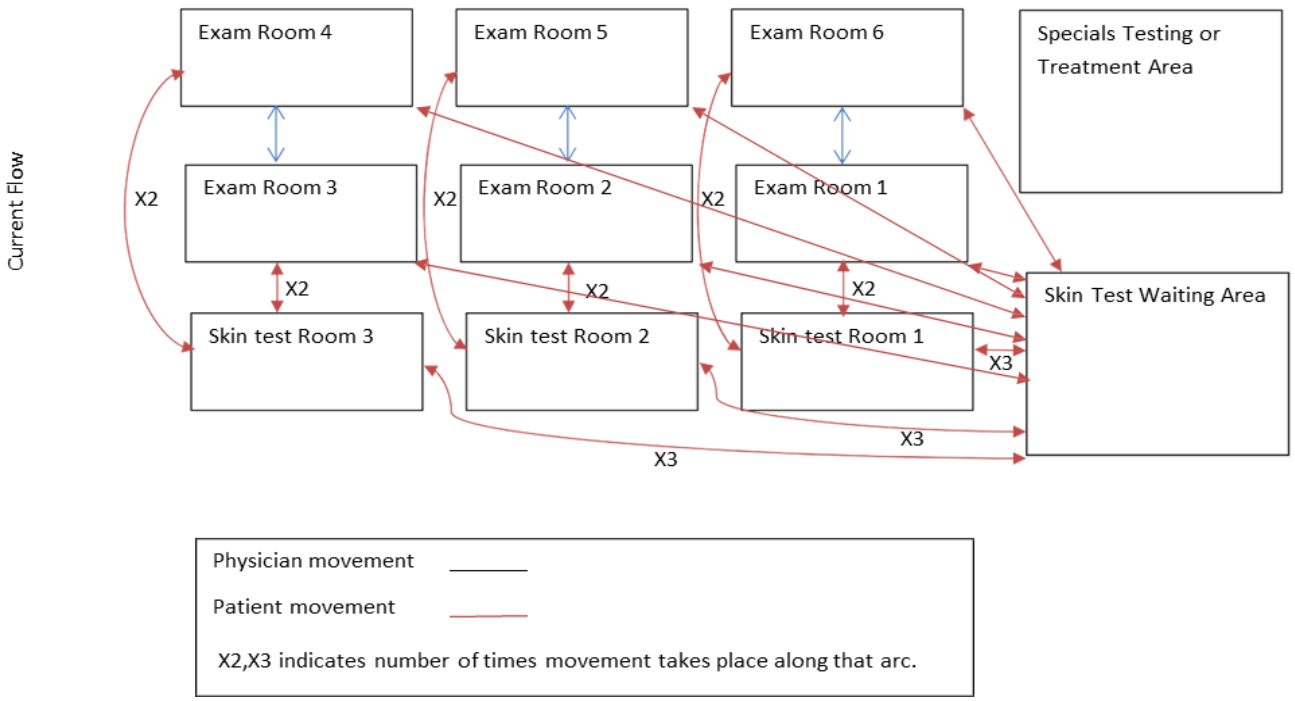

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Exhibit 4: Organizational Structure