



JUH experience in phlebotomy team

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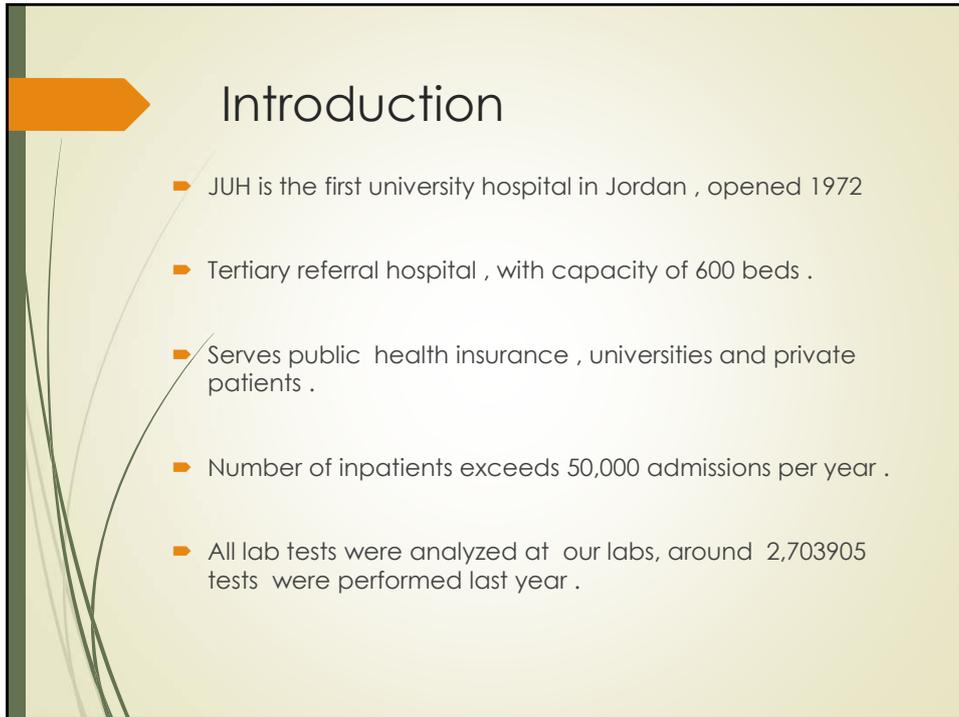
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Phlebotomy Definition

- Phlebotomy is the act of drawing or removing blood from the circulatory system through a cut (incision) or puncture in order to obtain a sample for analysis and diagnosis. Phlebotomy is also done as part of the patient's treatment for certain blood disorders .

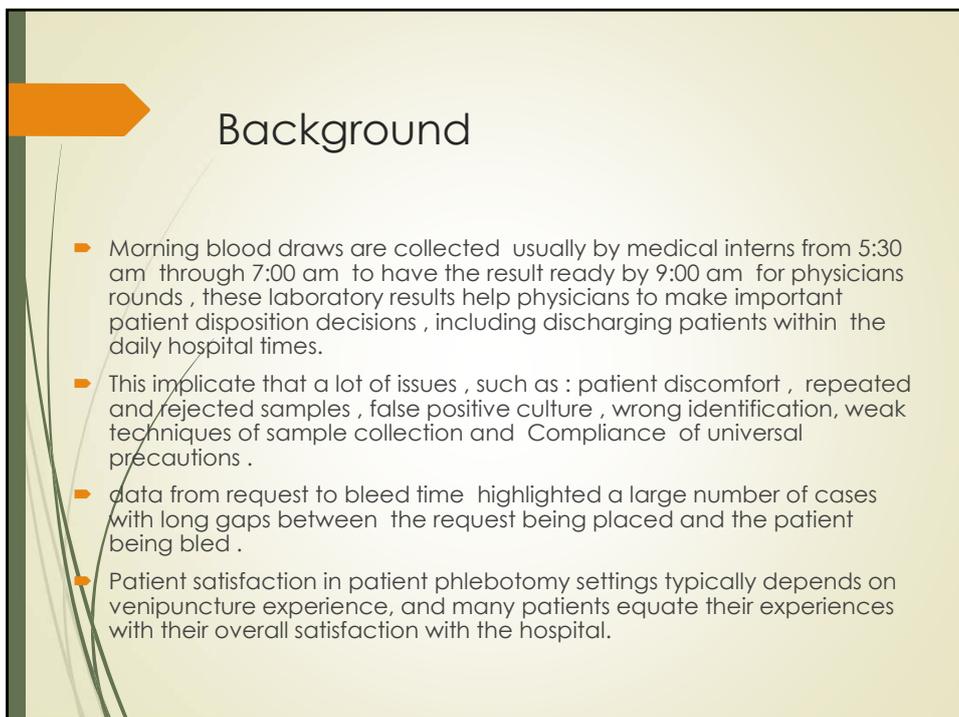
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Introduction

- ▶ JUH is the first university hospital in Jordan , opened 1972
- ▶ Tertiary referral hospital , with capacity of 600 beds .
- ▶ Serves public health insurance , universities and private patients .
- ▶ Number of inpatients exceeds 50,000 admissions per year .
- ▶ All lab tests were analyzed at our labs, around 2,703,905 tests were performed last year .

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Background

- ▶ Morning blood draws are collected usually by medical interns from 5:30 am through 7:00 am to have the result ready by 9:00 am for physicians rounds , these laboratory results help physicians to make important patient disposition decisions , including discharging patients within the daily hospital times.
- ▶ This implicate that a lot of issues , such as : patient discomfort , repeated and rejected samples , false positive culture , wrong identification, weak techniques of sample collection and Compliance of universal precautions .
- ▶ data from request to bleed time highlighted a large number of cases with long gaps between the request being placed and the patient being bled .
- ▶ Patient satisfaction in patient phlebotomy settings typically depends on venipuncture experience, and many patients equate their experiences with their overall satisfaction with the hospital.

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Goals

- ▶ to improve the overall patient experience and optimize the blood collection process by using phlebotomy team .
- ▶ Decrease blood samples rejection rate.
- ▶ Improve patient discharge process time .
- ▶ Increase patient , residents , interns , attending physicians satisfaction .

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Scope

- ▶ To initiate a **phlebotomy team** at Jordan university hospital for medical floor patients in fifth and sixth floor with bed occupancy rate around 80% and numbers of patients .
- ▶ The change was that the blood samples for medical patients was taken by interns doctors replaced by a dedicated phlebotomist team consisted of lab technician and qualified nurses .
- ▶ The doctors had placed the requests in the evening before 12 MN for the next morning with the intention of the patient being bled in the next morning
- ▶ The resources used were : assigned four staff as a phlebotomist , printer and routine consumables .

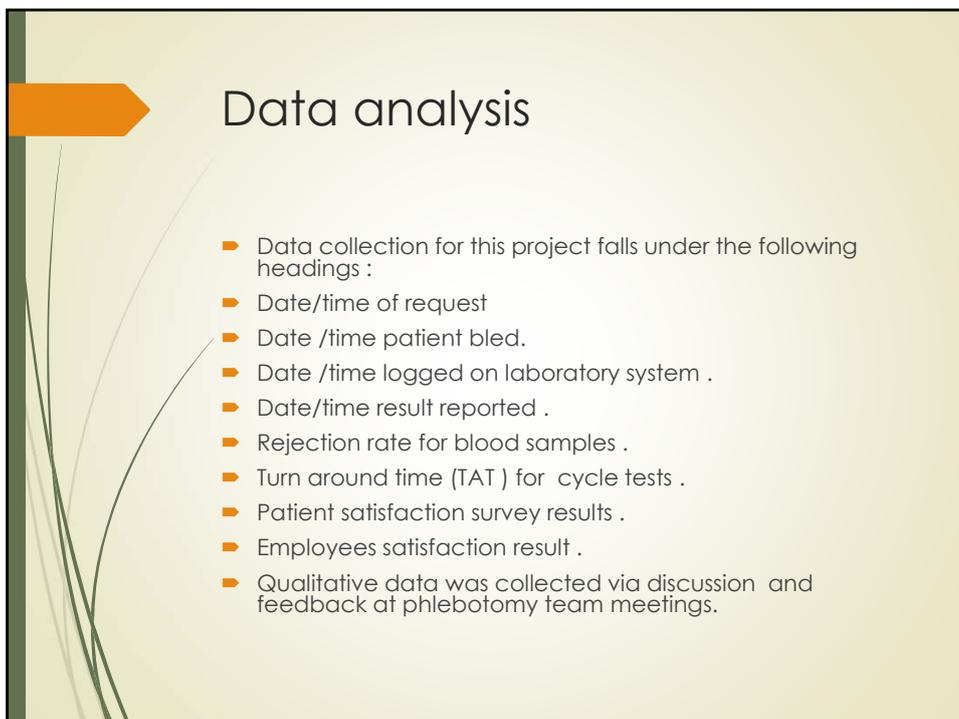
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How the changes were implemented ?

- ▶ Recommendation from FMEA committee about delay of blood administration procedure especially on B&C shifts.
- ▶ The hospital formulate a special committee to discuss this issue.
- ▶ The committee outline whole procedure from drawing to receiving including transportation.
- ▶ The assigned phlebotomy team were started in implementation on February 2019.
- ▶ The phlebotomy work hours was determined .
- ▶ Only one phlebotomist goes to each ward and draw blood on early morning between 5:30 till 7:00am .
- ▶ The quality staff start collect the data and measures to evaluate the performance of new process

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Data analysis

- ▶ Data collection for this project falls under the following headings :
- ▶ Date/time of request
- ▶ Date /time patient bled.
- ▶ Date /time logged on laboratory system .
- ▶ Date/time result reported .
- ▶ Rejection rate for blood samples .
- ▶ Turn around time (TAT) for cycle tests .
- ▶ Patient satisfaction survey results .
- ▶ Employees satisfaction result .
- ▶ Qualitative data was collected via discussion and feedback at phlebotomy team meetings.

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Data analysis

No of patients bled

Time from drawing to result

residents Satisfaction rate

Consultants satisfaction rate

Patients satisfaction rate

Early discharge process

Blood samples rejection rate

Data was extracted electronically from medical floors data entry report .

Effects of a Specimen Collection from phlebotomy on Pre analytical Errors

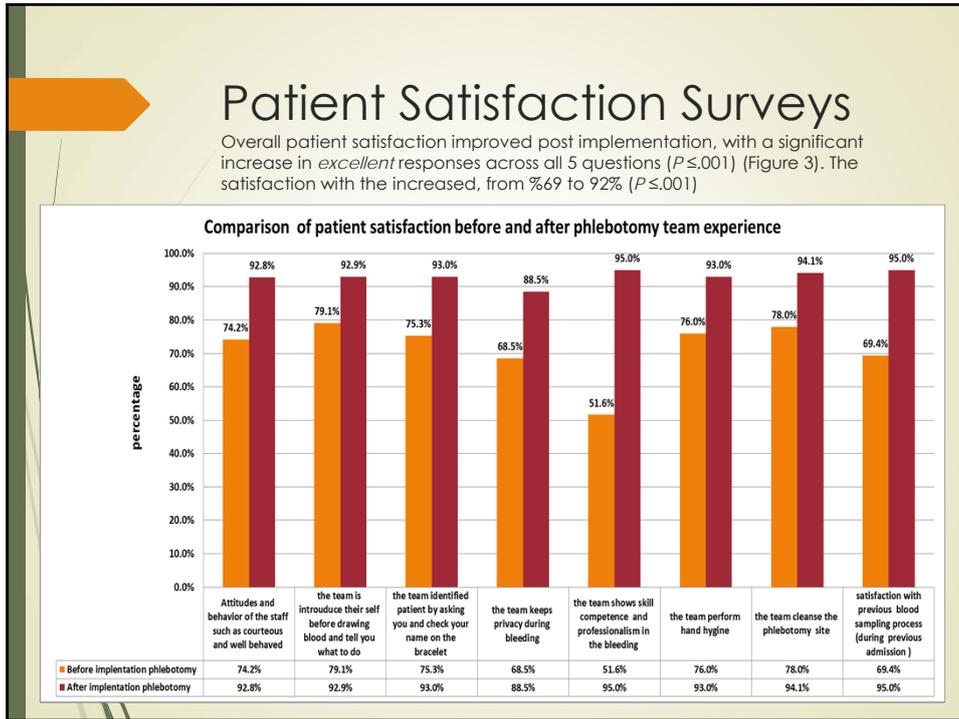
▶ pre implementation phlebotomy

- ▶ Rejection rate due to the following
- ▶ Error Type
- ▶ Mislabeled
- ▶ Unlabeled
- ▶ No Specimen Received

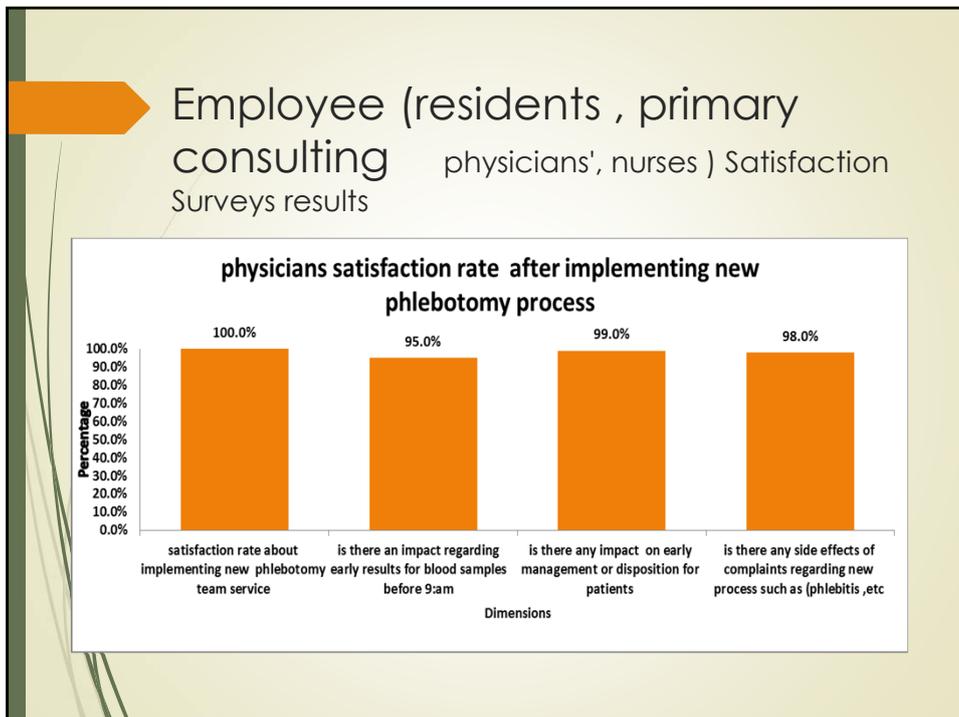
rate of rejection was high in some months .

▶ After implementation phlebotomy

- ▶ Significant decrease in rejection rate compared with values pre- implementation (P -value ≤ 0.05).



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Statistics shows

- ▶ there is a significant decrease in rejected samples comparing with pre phlebotomy team process .
- ▶ Significant increase in patient satisfaction rate .
- ▶ Increase efficiency to early decision on patients treatment or disposition .
- ▶ 100% reduction in phlebotomy service related complaints ,with positive comments now being regularly received .

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Other benefits

- ▶ phlebotomy team were able to collect the sample in one prick in a clean environment with minimal discomfort to the patients.

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How this improvement benefits patients

- ▶ Happier staff and patients .
- ▶ Phlebotomists gets to know the patients on their wards, which :
- ▶ Increases their success rate at obtaining high quality blood samples.
- ▶ Enables blood to be taken at fixed times and transported to the laboratory for analysis , thereby supporting timely treatment or discharge of patients .

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How will this be sustained, potential for the future

- ▶ This initiative has led to improve the efficiency of the phlebotomy rostering to continue to provide a phlebotomists on all wards is being put in place .
- ▶ Based on the feedback from doctors it was believed that earlier bleeds and test results would have a positive impact for patients .
- ▶ The benefits to the patients is that their discharge from hospital will not be delayed regarding delayed blood results, even the statistics did not shows the desired impact on discharge was not evident .

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Acknowledgments

- Special thanks to the nursing dept ,laboratory dept , medical interns for data collection , FMEA team for blood transfusion .



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Thanks



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