Barren River District Health Department (BRDHD)

219 Employees.
Eight counties. District Office: Bowling Green.
Population Served: 250,000

PI Team Members:

Ashley Lillard – Health Educator II
Crissy Rowland – Health Information Branch Director
Donna Davis – Support Staff
Lana McChesney – Local Health Nurse II
Leeann Hennion – Hart County Center Coordinator
Lisa Sowders – Manager of Administrative Services
Korana Durham – Health Information team member

Key Informants:

Julia Davidson – Director of Nursing
Heather Parnell – APRN

Barren River District Health Department
Promote · Protect · Prevent

PDSA — plan, do, act, study

Quality Improvement Story Board:
Quality Improvement in the Family Planning Clinic

PLAN
Identify an Opportunity and Plan for Improvement

1. Getting Started

BRDHD patient satisfaction surveys showed that patients perceived wait times to be too long. The goal of this improvement project is to improve patient flow and reduce patient wait times.

2. Assemble the Team

The QI team was comprised of the QI project coordinator, the process improvement team (PIT) subcommittee, and support staff from the health information Team (HIT).
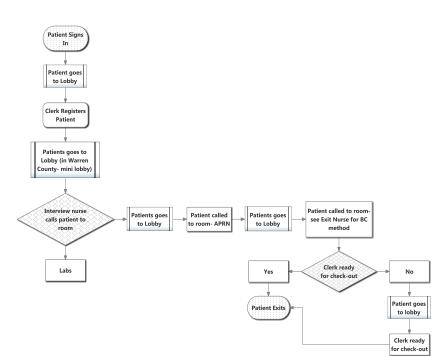
This team created a timeline for the project, along with time-based objectives and regularly scheduled meetings to evaluate progress.

3. Examine the Current Approach

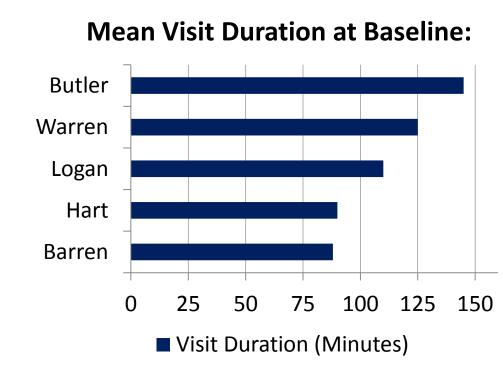Five baseline sites were selected for examination of the current approach.

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A patient flow analysis (PFA) tool was created for use with four of the five sites, and an existing PFA tool was used at the fifth site. These tools collected information about visit duration and wait times.
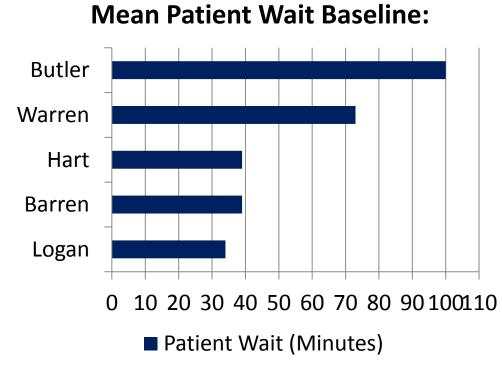
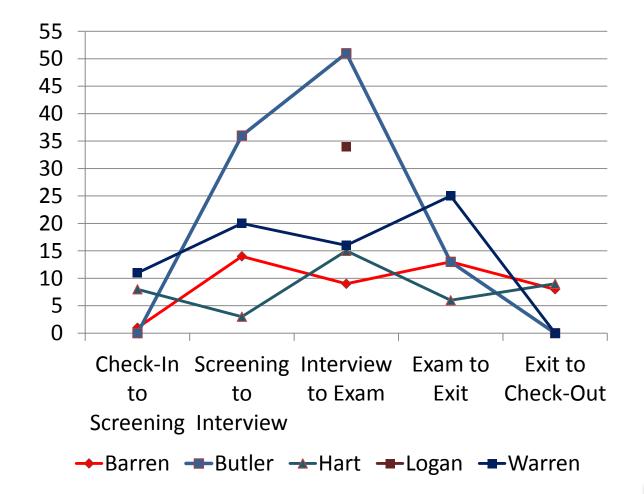The current patient flow was also examined using a flow chart.

Butler County had the longest average visit duration and wait times. Barren County had the shortest average visit duration, and Barren and Butler Counties tied for the shortest average wait times.

Due to problems with the PFA tool that was adapted for Logan County, wait times could not be determined, save for the wait time between interview and examination.
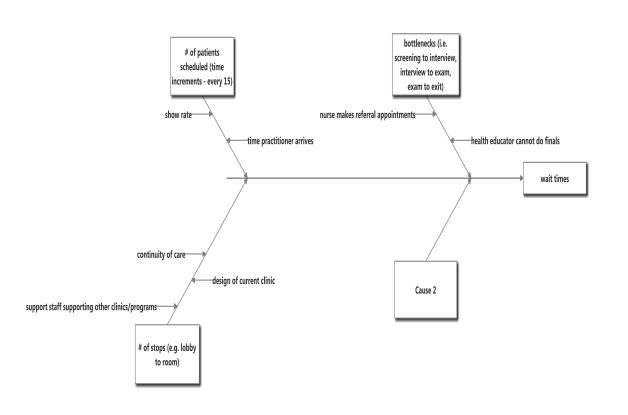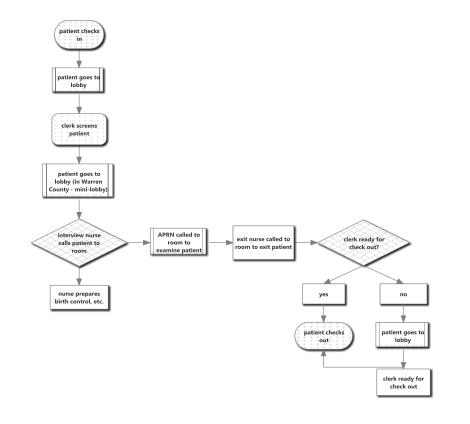
Mean Visit Duration at Baseline:

(Butler, Warren, Logan, Hart, Barren — Visit Duration (Minutes), 0 to 150)

Mean Patient Wait Baseline:

(Butler, Warren, Hart, Barren, Logan — Patient Wait (Minutes), 0 to 110)

(Check-In to Screening, Screening to Interview, Interview to Exam, Exam to Exit, Exit to Check-Out — Barren, Butler, Hart, Logan, Warren)

4. Identify Potential Solutions

The QI team analyzed the data, carried out unstructured interviews with program stakeholders (e.g. providers, staff, center coordinators, etc.), and conducted regular meetings to come up with potential solutions.

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5. Develop an Improvement Theory

Family planning clinic scheduling is limited by the capacity of the provider to see patients (e.g. one patient every 15 minutes), as well as the number of free clinic rooms. Clinic flow is further limited by the capacity of available staff to perform each step in the process.

DO
Test the Theory for Improvement

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6. Test the Theory

Two pilot sites were selected to test the improvement theory. New PFA tools were also created for use at both sites. These tools collected information on the visit type, whether the patient was new or needed an interpreter, and procedures carried out (e.g. referrals).
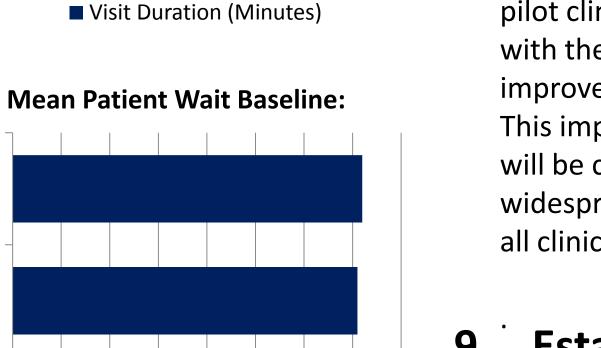
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STUDY
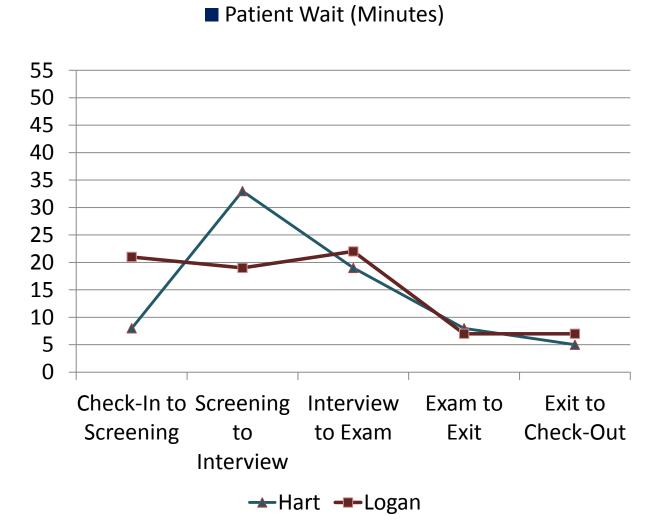### Use Data to Study Results of the Test

7. Study the Results

Average visit duration increased for Hart County and decreased for Logan County. The wait time between interview and examination decreased for Logan County, and average patient wait times were also calculated.

Project limitations include small sample size, indirect observation of wait times (i.e. through calculation, versus direct observation), numerous gaps in data collected, lack of complete adoption of recommendations, and inconsistent use of PFA tools..

Mean Visit Duration for Pilot:

(Hart, Logan — Visit Duration (Minutes), 0 to 150)

Mean Patient Wait Baseline:

(Hart, Logan — Patient Wait (Minutes), 0 to 80)

(Check-In to Screening, Screening to Interview, Interview to Exam, Exam to Exit, Exit to Check-Out — Hart, Logan)

ACT
Standardize the Improvement and Establish Future Plans

8. Standardize the Improvement or Develop New Theory

The QI team will examine which of the Logan County pilot clinics is associated with the strongest improvement in wait times. This improvement process will be considered for widespread adoption across all clinic sites.

9. Establish Future Plans

The QI team will develop recommendations for all clinic sites based upon these recommendations.

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